

(Founded in 1925 by Carl Murchison)

# GENETIC PSYCHOLOGY MONOGRAPHS

Child Behavior, Animal Behavior,  
and Comparative Psychology

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# AN EXPERIMENTAL STUDY OF WHAT YOUNG SCHOOL CHILDREN EXPECT FROM THEIR TEACHERS\*

*The Bank Street Schools, New York City*

BARBARA BIBER AND CLAUDIA LEWIS

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## I. INTRODUCTION<sup>1</sup>

A first grade teacher in a public school surveys her new roomful of children, many of whom have never set foot in the school building before. Because they do not know quite what to expect, perhaps told at home that they must remember above all to keep quiet and behave, they sit in her presence with awe and constraint.

This teacher can see that some of these children come from very underprivileged home situations. Because she knows the school neighborhood, she is aware that some of the children have been roughly handled, threatened with beatings, turned out to play on the street all day, or passed from neighbor to grandmother for a minimum of care while parents work.

She is determined that these children shall not fear her; that they shall be free and spontaneous in this schoolroom; that she will give them here an atmosphere where they can flower. She will implant her values in them—her values revolving around spontaneity and warmth and creative accomplishment.

Is she justified in such a hope? Just what will her "atmosphere" accomplish for these children? In fact, what in the first place does she actually *know* about the feeling and expectations with which these children have come to school? Do they fear her? What do they think will happen to them if they are "bad"? What are their concepts of "badness"? Of "goodness"? In short, what are their child values?

The present study has grown out of just such practical questions as these. As members of the Bank Street Workshop Staff engaged in an in-service training program in three public schools in New York City, we have been in close contact with teachers who are trying to introduce into their classrooms the new program that is part of the overall transition period in the New York City public schools, a program that involves more activity in the curriculum, more integration of areas of learning, more adaptation to the needs of the children. We have worked with these teachers in their struggles with the changing concepts of discipline, freedom, and authority. We have worked with them in their honest and urgent attempts to delve deeper in their understanding of the thoughts and feelings of the children in their classrooms. Finally, we have begun to explore with them this whole

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<sup>1</sup>The reader is asked to keep in mind that the practices described in these schools at the time our data were collected, a few years ago, may not necessarily hold for these same schools today. For instance, the Praise Cards which figured in the North School at the time of our study are not used in that school today. In the lower grades especially there have been extensive changes in curriculum practices.

question of "classroom atmosphere," its ingredients, and its effects on children.

This exploration is taking the form of a large study, of which the present paper is one segment. Here we are confining ourselves to the kinds of questions suggested above relative to how children feel and how they are functioning in the particular kind of classroom atmosphere which they and their teacher together are creating; to some extent we shall have to touch upon one of the central considerations of the larger study—that is, the question of how much the children's expectations and feelings seem to reflect the attitudes and methods of the teacher, and conversely what attitudes seem to exist or persist in spite of any realistic basis for them in the atmosphere of a particular classroom. Though we are using many methods in the larger study, our hope in this particular section of it has been to devise a tool which might probe somewhat more deeply into children's feelings than the observational method would take us. It has been our hope, too, that this tool might prove to be something that we could eventually put into the hands of teachers themselves, to use as a short cut to further their understanding of the expectations, the hopes, fears, and joys of the children in their classrooms.

The technique in this study is a structured projective test, consisting of a combination of picture and explanation presented to the child. He is given not only the picture to look at, but is told what is happening in the picture, and is asked to explain why, or to foretell what will happen next, etc. Thus the test has much in common with the "fables" used by L. Düss (+). We are aware that the child, in his explanations and answers, may reflect either the actual practices in his schoolroom or feelings which are displaced from his broader life experience. We recognize that a good deal must be known about the actual atmosphere of a classroom before it can be decided just what the child's responses are reflecting, and that even then it may not be too easy to make a decisive interpretation.

The deeper levels of children's feelings, wishes, fears, are being widely explored by the Rorschach technique, and the Thematic Apperception Test, in the hands of clinical psychologists and psychotherapists. Valuable as these techniques are, they are unsuitable for use in the hands of teachers or other laymen untrained in their administration and interpretation, and they are not structured in the direction of feelings *in school*, as we wished to structure our test.

Likewise doll play has been a projective technique widely used, particularly with pre-school ages. We decided against its use for this study because



of a feeling that our group of public school children might not feel free to "play" in a natural way with such materials, in the school atmosphere. It is a very different matter to present the nursery school child with these toys, because in the nursery school such play is the order of the day, as it is not the public school grades. However, there is the possibility that we may be mistaken in this assumption. There is certainly room for exploration with this technique in the public school.

A technique somewhat similar to ours has been used by Amen and Temple (1, 5), in their studies of areas of anxiety in young children. They devised a set of pictures in which the faces are left blank, and the child is provided with movable faces with happy and unhappy expressions, which he is to choose between and put into place on each picture. The situations pictured involve injury, swinging, aggressive attack, scolding, eating alone, play with younger children, going to bed alone, etc. Amen and Temple found that this technique did reveal anxiety areas, and they recommended it for use with teachers, with the suggestion that pictures on child-teacher relations should be included.

In our set of pictures we have not included this element of manipulation of a two-expression face. Such a control gives the child very little latitude for projecting his feelings. Though we did want a restricted and structured test, still we wished to leave more scope for projection of feeling than the Amen test allows.



## II. PROCEDURE

### A. GENERAL METHOD

We devised 13 schoolroom situations that would seem familiar to the public school children. These pictured situations revolved around areas of feeling as indicated in Table 1 (we will use the terminology we have fallen into for purposes of easy identification of the pictures).

TABLE 1

Area	No. of Pictures
<i>Trouble</i>	
What children expect of the teacher when they are in trouble.	2
<i>Happiness</i>	
What teachers do to make children feel happy.	1
Children's free choices.	1
<i>Good Behavior</i>	
Concepts of praise and reward.	2
<i>Bad Behavior</i>	
Concepts of the kind of behavior that will bring punishment.	2
<i>Punishments</i>	
Punishments expected when children aggress against teacher.	2
Punishments expected when children fight and quarrel among themselves.	2
<i>Anger</i>	
What teachers do to make children feel angry.	1

Though each area is usually represented by at least two pictures, one featuring a boy, or boys, and the other a girl, or girls, there was no attempt made to keep the girl and boy situations identically matched for purposes of a statistical check. In the "punishment" pictures, for instance, we were well aware that when we pictured a boy hitting a teacher and a girl merely making a face at her, these two offenses were probably not of comparable seriousness in the minds of the children. However, we did feel them to represent real life situations which the children would accept as such and react to as such—as they might not have if we had pictured the *unusual*—i.e., a girl hitting the teacher.

In other words, we were matching what a boy aggressing against a teacher would be likely to do in reality—namely, hit—with what an aggressing girl might do—make a face. Furthermore, we wanted to get a *cluster* of responses in each area, from which we could build up a concept of a child's feeling.

Every effort was made to make the pictures recognizable as their own situation to the group of public school children we were using as subjects. The artist who painted the pictures, Charlotte Heaton-Sessions, visited the school in order to familiarize herself with its general physical set-up.

Because this school population contained a mixture of white and Negro children, the artist attempted—very successfully—to neutralize all children pictured; that is, make them "borderline" types, so that they might easily be taken for either white or Negro by the child looking at the picture.

A wide use of this test in schools where the physical plant and the general school mores are completely different from the ones we have represented, might call for a revised set of pictures. As will be seen, we had some doubt that the private school children who participated in this study were identifying these pictured situations as their own.

## B. SUBJECTS

The test was presented to a total of 94 children in the New York public school mentioned above, which we shall call the North School, and 25 in a private experimental school in New York City—the "South School"—for purposes of comparison. Represented among the 94 public school children were three classes of first graders and one of second graders. All of these children were tested in the spring of the year, though one class of first graders was tested a year later than the others. These were the children of a teacher whose previous class was in the group we had already tested. Thus, among these four different groups there were only three teachers represented. We characterize the groups in Table 2.

TABLE 2

North School	Boys	Girls	Total
C (2nd Grade)	13	12	25
A (1st Grade)	11	15	26
B (1st Grade)	12	8	20
BB (1st Grade)	13	10	23
	49	45	94
South School	14	11	25

### 1. The North School

a. *The teachers.* In this school, it must be remembered, there was a Workshop for the purpose of helping teachers with the problems involved in applying the new program. All of the teachers whose children were used as subjects in this study were members of this workshop. This means not

only that they were receiving active professional help in planning curriculums and studying their children, but that they themselves were forward-looking individuals with high professional standards and a real zest for their jobs. The atmosphere in their classrooms was by no means "authoritarian" in the old sense. There was considerable activity in their rooms, with a good deal of freedom to talk and to move around. And the relationships among the staff members and between staff and children were warmer and more personal than is commonly believed to be the case in the classrooms of a large public school system.

However, there were distinct differences among our three teachers, in methods and in the atmospheres created in their classrooms. Since these differences, and their genesis and ingredients, are the subject of the larger study, we will not develop them in detail here. However, some of the outstanding dissimilarities must be pointed out, so that certain differences in the responses of the children in the respective room situations can be seen in the light of all the factors that may be influential in forming them.

The teacher of the *BB* group, who also was the teacher of the *B* group the previous year, was in the course of this study developing her techniques and understanding of children and curriculum noticeably. The atmosphere of her classroom, and the values she was seeking to establish, were somewhat similar to those of the South School. That is, she was learning to bring out the spontaneity of her children, without letting her free atmosphere degenerate into one of license; she was learning how to let her children be active without becoming disorganized; she was growing in her understanding of the value of play as a tool for learning, and was successful in building a lively and rich curriculum around the children's interests; and she was making an attempt to see her children as individual human beings whose life in school with her was only a part of their larger life orbit. She seemed often able to get inside of her children, to perceive their feelings and needs with sensitivity.

The teacher of the *A* group was a sympathetic, motherly person who genuinely enjoyed children. It was one of her pupils who was heard to remark, "I love school, it's just like home." The children in this classroom had considerable opportunity for free play and for free moving about, and could frequently be seen enjoying a happy story period with their teacher, or the pleasures of skipping about the room rhythmically to music.

Their free play, however, was not always expanded and used as a basis on which to build a lively and meaty curriculum, and the children were often over-noisy and restless. This was due partly, of course, to the fact

that the teacher was in the process of learning the techniques of controlling children in a free classroom, and had not yet developed sufficient organization in her methods, nor had she yet learned how to set clear boundaries for the children. She was only just beginning to develop a real background of understanding of children's growth and development and needs.

The C teacher, second grade, was probably not functioning up to the best of her capacity because of the difficulties she was having with the classroom discipline, which worried her considerably. In a room crowded with desks, she was courageously attempting to let the children carry on dramatic play and construct their own properties. She had not yet learned how to manage this without letting the freedom get out of bounds.

b. *The children.* This district, just a few years ago, was almost entirely white, whereas now it is largely Negro, with a small percentage of Puerto Ricans also in the population. At the time of this study the school enrollment included 70 per cent classified as Negro, 30 per cent white, and of all these 15 per cent as Spanish-speaking.

Real estate agents call the district "middle class," though there is a wide variation in family incomes.

There is a rapid turnover in the school population, with many families moving up from the South.

Living conditions for the families in this district included many homes where the mother was working, the father was out of the picture entirely or away in the service, and grandmothers were helping to care for the children. In many homes there were no grandmothers to do the caring, and the children were literally left to themselves, with their latchkeys about their necks.

There was a slight difference in the racial distribution in the classes included in this study, but in every group the majority of the children were Negro. Since we are not concerned here with a study of "racial" characteristics, we have not felt it too important to plot this racial distribution in detail.

Data on Intelligence Quotients are also lacking. We felt that they were not crucial to this test and that it was possible to proceed without them. Children were not grouped in these classrooms according to intelligence.

## 2. *The South School*

<sup>1</sup> This is one of the well known experimental schools in the city, which, for the sake of demonstration, attempts to operate to a degree within the restrictions of public school conditions, with large groups of children.

Generally speaking, the children are of above average intelligence. Their parents are largely professional people of moderate means, interested in and in sympathy with the educational aims and methods of the school, including the non-authoritative type of discipline with its emphasis on self-control. In this school the curriculum emphasis in the first grade is on dramatic play and exploration of the environment. There is no formal instruction in reading, writing, and arithmetic in this grade.

The children in the first grade class tested in this study were spontaneous and active, yet sufficiently organized and controlled to be able to make the most of their opportunities. The whole 25 or 30 of them, under their teacher's clear guidance, could sit in a circle and carry on a lively "discussion" about a recent trip in the neighborhood, or about the great city of blocks they had constructed on the floor that morning. With the help of "rules" worked out jointly by the teacher and themselves, they achieved sufficient control so that they could be taken out weekly on subways and busses, or on foot, to explore the city. Their room was bright with their paintings and drawings and with other evidence of their constructive, creative work.

### C. PRESENTATION OF TEST

The pictures were shown always in a serial order, sorted so that pictures in the same area of feeling did not appear together.

The pictures were described, and questions asked about them, always in the same words, though Miss Lewis, who gave the test, did not hesitate to establish her rapport with the children by means of any conversation before and after that seemed appropriate. There was practically no deviation, however, in the actual words used to present each situation.

Miss Lewis felt that rapport was very easily established with most of the children. In the North School, all but those in the *BB* group were already familiar with her, since she had been working in their classrooms in connection with the Workshop.

The children were taken individually for the test. In the cases of two of the classrooms, *A* and *B*, it was possible to retire to a corner blocked off right in the classrooms. This seemed to be an excellent arrangement. The children felt completely at home, there in their own rooms, and any interference was entirely negligible. Children in the *C*, *BB*, and South School groups were taken individually to nearby rooms. Those in the *C* group had to go some distance to an entirely strange room. They seemed less at ease than the children in any of the other groups.

The children in all groups were told that this was "a game of looking at pictures," "something like a guessing game," "something like a game of making up stories about pictures." Miss Lewis explained her writing of the answers after the child's very *first* response, saying something like, "Oh that's a good one, I'll write that down so I won't forget it." She did not feel that the children were made self-conscious by seeing this writing going on. In fact, to many of them it was something of a stimulus. They liked to see how much paper their "stories" had filled—a few of them went on at great length, possibly chiefly just to see the paper filling up.

The children were of course encouraged, or rather allowed, to talk as freely as they liked about the pictures. The majority of the children responded with simple replies that were very easily recorded verbatim. Others poured out a torrent of talk which could not be taken down complete. In such cases, the first part of the response, and the general gist of it all were recorded, with a note that it did not represent a full verbatim report.

The pictures were attractive enough so that the children for the most part seemed to get real pleasure out of looking at them. To the children in the North School, to whom such tests are rarely given, the whole experience seemed to be a great lark. They thoroughly enjoyed the "game" and clamored for "another turn." The South School children, too, though more accustomed to this kind of experiment, entered in with zest and also begged to be allowed to "do it again."

#### D. METHOD OF ANALYSIS

We were faced with various types of responses—many single answers to our questions, others consisting of torrents, some in the same vein but sometimes including several kinds of attitudes within the one child's response. How to deal with this? We wanted to avoid cutting up a child's response into its fragmentary parts, yet frequently it seemed impossible to classify a response as indicating only one attitude.

We started with each child's response as an entity. Those that were multiple in attitude were simply called "combinations." Percentages were then figured—such-and-such a percentage of children gave statements of one clear-cut attitude or another; such-and-such a percentage expressed more than one attitude.

But this did not actually reveal the full content of the replies, which was what we were really after. Furthermore, the number of children who expressed more than one attitude on each question was rather negligible in the long run. This kind of analysis did not seem to involve any very fruitful implications.



Therefore we took the thinking, the attitudes, as our point of departure in making our computations. The percentages expressed on the tables are in terms of *responses*, not children. But these responses must be understood as "attitudes expressed." We have not broken down a child's response into its phrases, repeats, elaborations. If one kind of attitude is expressed, it is considered one response, regardless of how it is stated.

On almost every question, there were one or two replies which were not very clear. We discarded them rather than force interpretations upon them.

The number of children whose replies we are considering on each question is indicated in the first figure under *N* in the tables. The second figure shows additional attitudes expressed. For instance, in Table 3, the reader will see

TABLE 3  
THE SICK BOY

	<i>C</i> <i>N</i> =25+0	<i>A</i> <i>N</i> =26+1	<i>B</i> <i>N</i> =19+1	<i>BB</i> <i>N</i> =23+0	North <i>N</i> =93+2	South <i>N</i> =25+0
Practical advice	.38	.81	.75	.56	.76	.63
Helpful questions	0	0	0	.13	.01	.70
Warmth	.08	.15	.10	.17	.13	.12
Unsympathetic	0	.04	.10	.09	.05	0
<i>X</i>	.04	0	.05	.04	.03	0

Note: On this and all the following tables the reader is reminded that *N* is not in terms of children but of responses, or kinds of attitudes expressed, though the number of children is indicated in each case in the first figure under *N*. Thus in the above table, in the North School there were 93 children whose replies were used, but 95 attitudes were expressed.

under *C*, "*N*=25+0." This means that there were 25 children in Group *C* giving usable replies on this question, and in this case all gave an expression of a single attitude. However, in Group *A*, "*N*=26+1." This means that there were 26 children in the group, but 27 attitudes were expressed. In this case, one of these 26 children expressed two different ideas in his answer.

The categories for analysis were worked out as the responses were studied over. Each answer was typed on a card, with only a code number on the back to identify it as to school, grade, and child. These cards were studied, sorted, and resorted, until meaningful categories for analysis emerged. There were almost always a few answers that were very difficult to classify in any way. They were called *X*, or special replies.

Differences in proportions were not considered statistically significant unless they met the test of the 5 per cent level of confidence.



### III. RESULTS

In this discussion of results, the questions will be grouped into their areas, rather than taken up singly in the order in which they were given.

#### A. AREA: TROUBLE

##### 1. *The Sick Boy*

*Explanation:* "This little boy isn't feeling well. He's coming up to the teacher and telling her he has a stomach ache. What do you think the teacher is saying to him?"

Responses fell into two main categories: (a) Those in which the teacher was seen as a sympathetic, helpful person in this situation; and (b) those in which she seemed unsympathetic, either blaming him or indicating in some way that there must be a relation between the child's sickness and bad behavior. "You be good and you'll feel well."

There were a very few special responses that were hard to classify, i.e., "You're sick," and another in which the child kept ignoring the explanation that was given and insisted that the little boy had been hit—"Teacher tell him why did he hit him back?"

The responses that we call sympathetic can themselves be divided into three areas: (a) The teacher is expected to be a giver of practical advice only. The whole tone is unemotional. The teacher merely says "Go down to the nurse," or "Go to the doctor," etc. (b) She takes a questioning interest—wants to know what happened, asks such helpful questions as "What's the matter?" or "Did you eat too many sweets?" or "Somebody hit you?" (c) She herself becomes sympathetically involved in the child's difficulty, expressing direct concern or warmth, or saying that she herself will do something about it: "Told him to come to her," or "Poor boy," or "Don't worry about it;" likewise, "Come here, I'll send you to the nurse."

It is true that it is sometimes a little difficult to draw the line between what constitutes a response of this sort and those that we classify as merely practical, unemotional advice. The last example above, for instance, is a little difficult to interpret as one or the other. Our criterion for putting it in this category was not so much the practical substance of the reply but the shading of sympathy indicated by the teacher saying *she* would send the boy to the nurse, and by her gesture of drawing him to her with her words, "Come here."

In the North School the concept of the teacher as a giver of practical advice was the leading one, appearing in 76 per cent of the replies. The

total picture is certainly one of a very unemotional teacher. She merely gives directions about going down to the nurse or doctor with a minimum of warmth and personal sympathy, and a minimum of blame or indifference. The responses including an element of real warmth aggregated only 13 per cent, while the questioning interests (appearing only in the *BB* group) and likewise the unsympathetic responses, were negligible (see Table 3).

The picture at the South School is similar in its large outlines. That is, the children conceive of the teacher here chiefly as a giver of practical advice (68 per cent) and responses indicating positive personal warmth are few (12 per cent). In these ways the South School children appear to be very similar to the North School children.

The difference comes in the responses indicating a questioning interest. The 20 per cent of replies including this questioning element ("What's the matter?" "How did you get it?") is a significantly greater proportion than the 3 per cent at the North School. What are the implications of this? It appears to us that the South School children are here reflecting their actual schoolroom situation. The South School teachers probably would handle the problem of the sick child in just the way that is suggested here—with practical steps for remedy and with considerable sympathetic questioning to find out what the trouble is about, in order to get back of the behavior. "What's the matter?" strikes us as a phrase quite typical and descriptive of the approach of the South School teacher in a situation of mild difficulty like this one.

This is not to say that the North School teachers also would not use this approach. As we have said before, they were a warm group of public school teachers, sympathetic and very human with their children. It may be that the North School children here are not reflecting the reality of their school situation to the extent that the South School children are. Possibly they are bringing with them certain attitudes and feelings outside of their school experience that cloud their perceptions of what really goes on in the school room. This possibility is something we wish to keep in mind throughout this material. It may be that certain questions and pictures may bring out in the children more projected feelings than others. Does this Sick Boy question reveal that the North School children do not see their teachers as quite the sympathetic people they really are, when children are in trouble?

Or are the teachers really at fault, failing to get across to the children the sympathy they feel?

It is important to note that there *is* one group at the North School, *BB*, where the questioning interest is expressed just as at the South School, and

where, indeed, it would be very difficult to point out any very significant differences from South School replies.

And interestingly enough, the teacher of this group, as we mentioned in the introduction, was the one who was making great strides in developing her curriculum and her teaching techniques. She was the teacher most closely resembling the South School teacher in her approach and her values.

Did she succeed more than the others at the North School in breaking down the preconceived notions her children brought to school?

These considerations will perhaps become clarified as we proceed through the material.

## 2. *The Lost Bracelet*

*Explanation:* "Oh look at this little girl. She's crying—see her tears? She's telling the teacher that she lost the new bracelet she got for her birthday. What do you think the teacher is saying to her?"

Though this situation is by no means a duplicate of that pictured in the Sick Boy question, yet the responses do fall into the same general categories: (a) the sympathetic ones in which the teacher is either a giver of practical advice, an asker of helpful questions, a warm comforter; or (b) the unsympathetic categories, in which she blames the child or, (as did not happen on the Sick Boy question) blames others, suggesting that the bracelet may have been stolen.

However, the results are not identical with those of the little sick boy situation. This little girl's tears and loss of her bracelet bring out in the North School children much more of an expectation that the teacher will give warm comfort. Such expectations are present in 29 per cent of the children's replies, compared with only 13 per cent on the Sick Boy. Likewise there are more helpful questions. At the same time, there is more indifference or blame on the child, expressed in such ways as "You shouldn't have your bracelet off," "I can't help it!" "Cause she was cuttin' up." Such answers are present in 18 per cent of the replies. It will be remembered that "blame" figured only in an extremely negligible amount—5 per cent—on the Sick Boy. The suspicion that children may have stolen the bracelet is present in 12 per cent of the replies (see Table 4).

Thus we see that this situation seems to evoke more highly toned emotional expectations of the teacher—both positive and negative—than the sick boy situation.

When we turn to the South School, we find very comparable results, in that here too the responses are more highly toned in both directions than

TABLE 4  
THE LOST BRACELET

	<i>C</i> <i>N</i> =25+2	<i>A</i> <i>N</i> =26+0	<i>B</i> <i>N</i> =18+2	<i>HH</i> <i>N</i> =23+1	North <i>N</i> =92+5	South <i>N</i> =23+2
Practical Advice	.59	.15	.10	.25	.29	.24
Helpful Questions	.15	.11	.10	.12	.12	0
Warmth	.11	.31	.35	.42	.29	.48
Unsympathetic to Child	.07	.27	.30	.08	.18	.16
Blame on Others	.07	.15	.15	.12	.12	.08
X	0	0	0	0	0	.04

they were on the Sick Boy question. Many of the percentages, too, are very similar to those at the North School—approximately the same amount of practical advice and the same amount of blame toward self and others. However, there is a difference in the sympathetic categories. Whereas the North School children expect more sympathy on this question than they did on the Sick Boy, in the form of more helpful questions and more direct warmth from the teacher, in the case of the South School children the sympathy is largely in terms of an outpouring of comfort and warmth. The 48 per cent of replies in this direct warmth category is not significantly more than the 29 per cent at the North School, though it is close to it, on the .07 level. Such replies are, "I'm so sorry," "Well, we'll have to go out and find it," "Don't cry, we'll find it," "Don't worry about that."

At this point we may be justified in saying that the South School children appear to have a concept of a generally more sympathetic teacher than the North School children have. In the Sick Boy situation the sympathy took the form of more of a questioning interest; in the Lost Bracelet situation the sympathy is in the form of more direct comfort and warmth. This difference in the *form* the sympathy takes is probably due to the fact that these two pictured situations are quite different in nature.

In planning these two pictures for the "trouble" area, though we were not trying to depict absolutely comparable situations, we thought they were generally parallel. However, it appears to us now that this Lost Bracelet situation may really be more of a child's tragedy than the sickness situation. After all, the little girl is shown with tears on her face, as the boy is not. And sickness in school may not actually be an experience so well-known to a child as loss of something cherished. Furthermore, is it not true that sickness is something for a child to lay at the door of the grown-ups? Sickness in children is really a problem for the adults to handle.

The very fact that the Lost Bracelet brings out more self-blaming ré-

sponses seems to indicate that it is more of a child's problem. This situation really arouses deeper feelings. It is more of a child tragedy.

(These findings might stand as a warning to investigators to avoid exploration of an area of feeling with just one pictured situation which is considered as "typical." So much depends on the context! They also suggest that in a subsequent test it might be wise to experiment a little first with new materials in this area to find out what would constitute an equivalent pair of sympathy pictures.)

As we stated above, then, if sympathetic responses for the South School children are in the form of questioning interest in the Sick Boy situation, and in the form of direct warmth on the Lost Bracelet, it is likely that the reason is because the situations are different and the teachers *do* react differently in them, with more comfort for the child who is in tears over her personal loss.

This brings us back to the point raised at the end of our discussion of the Sick Boy question. Are the differences between the schools due to *actual* differences in the way children in trouble are dealt with in the two schools? Or are they due to differences in the children's out-of-school lives so that they project on to the teacher figure expectations which are displaced from the nature of their experience with other adults? In both the Sick Boy and The Bracelet situations, the nature of the responses does seem to indicate the possibility of the presence of some projection of feeling.

The fact that there are differences among individual teachers in the North School points to the possibility that even though the children's projected feelings in this school may not be congruent with the real teacher at the beginning, their attitudes are influenced by the particular teacher's feelings toward them when her classroom atmosphere is such as to allow her to express these feelings with relative freedom. It is interesting to note that the children of the *BB* teacher give more warmth responses in this bracelet situation than any of the others at the North School (though not significantly more from the statistical standpoint, in all cases), which is in line with the findings on the Sick Boy for this teacher. It should be noted here, also, that the children of the *C* teacher (second grade) give significantly fewer warmth responses than all of the other groups (with the exception of Group *A*), which one might be led to expect from this teacher's actual behavior, which appeared to be somewhat less warm and informal with the children than that of any of the other teachers.

Before leaving this "trouble" area, one more remark should be made. Is it not a matter for pause that in both schools there are children who, to

the extent of 16 to 18 per cent, expect the teacher to be *unsympathetic*, who feel cut off from adult comfort, who are ready to take blame on themselves?

## B. AREA: HAPPINESS

### 1. *The Happy Children*

*Explanation:* "Here are some children who are feeling very happy. See, this little girl is clapping her hands, and they're all laughing, aren't they? They're very happy. What do you think the teacher did to make them feel so happy?"

Responses on this question fall into two camps, so to speak. (a) There are the children who adhere to what we have called the idea of pleasure. That is, in a perfectly natural child-like way the concept of happiness revolves around something that gives the children pleasure, like play and food and parties, going on trips, doing school work they like, having a nice teacher—"The teacher never scold them," "The teacher laughing and they like the teacher." (b) Of entirely different natures are two other kinds of responses, those which stress the virtue of *compliance*—"They're happy 'cause they're being quiet," and those which suggest a sense of freedom from school restraints, the very opposite of compliance. "Let them do anything they wanted," "Maybe they're not staying in school so long," "Don't let them write no more things," "Let them talk when they want to."

In the North School, 77 per cent of the responses were given over to the idea of pleasure. This is the picture that one would hope and want to find in spontaneous, normal children (see Table 5).

TABLE 5  
THE HAPPY CHILDREN

	<i>C</i> <i>N</i> =24+2	<i>A</i> <i>N</i> =26+0	<i>B</i> <i>N</i> =18+1	<i>BB</i> <i>N</i> =23+1	North <i>N</i> =91+4	South <i>N</i> =23+2
Pleasure	.81	.77	.58	.88	.77	.52
Compliance	.08	.11	.32	.08	.14	.16
Freedom from Restraints	.11	.08	.05	.04	.07	.28
$\Sigma$	0	.04	.05	0	.02	.04

Just what are these "pleasures"? Approximately one-third of them come under the heading of "playing" (including use of materials, such as painting and drawing); another third comprises a group of pleasures we have lumped together as similar—food, presents, and parties. Of considerably less importance are going on trips or picnics, having a nice teacher, or doing school work (see Table 6).



TABLE 6  
THE HAPPY CHILDREN: BREAKDOWN OF PLEASURE

	<i>C</i> <i>N</i> =26	<i>A</i> <i>N</i> =20	<i>B</i> <i>N</i> =17	<i>BB</i> <i>N</i> =23	North <i>N</i> =86	South <i>N</i> =14
Nice Teacher	.15	.05	.18	.17	.14	0
Food, Parties	.19	.30	.41	.39	.31	.50
Play, Games, Use of Materials	.50	.35	.23	.30	.36	.29
School Work	.08	.10	.06	.09	.08	.14
Trips, Picnics	.08	.20	.12	.04	.10	.07

In 14 per cent of the children's answers, happiness was conceived of as related to being good. However, the general idea of goodness appeared somewhat more frequently, if one includes the idea as it appeared in the peripheral comments of the children, as well as in their direct responses to the question. For instance, a number of the children volunteered with the information that "They were good," even before the picture was fully described and the question asked about what the teacher did to make the children happy. If one includes such comments as responses, then we find the idea of goodness associated with happiness to the extent of 20 per cent. A concrete example of a reply that includes this peripheral thinking is "They were all good children so she gave them candy" (see Table 7).

TABLE 7  
THE HAPPY CHILDREN: COMPLIANCE AMPLIFIED WITH THE IDEA OF GOODNESS

	<i>C</i> <i>N</i> =29	<i>A</i> <i>N</i> =28	<i>B</i> <i>N</i> =19	<i>BB</i> <i>N</i> =26	North <i>N</i> =102	South <i>N</i> =25
	.18	.18	.32	.15	.20	.16

The concept of happiness following as a result of the lid being lifted off the ordinary school restraints appears in a negligible 7 per cent of the replies. Perhaps this is not surprising in view of the relatively free atmosphere provided in all of these classrooms in this particular public school. It would be interesting to see if this concept would be a much more important one in a public school atmosphere that was much more restrictive.

Frankly, the responses of the children at the South School surprised us on this question. Knowing the atmosphere of freedom in this school, the philosophy of play around which the program is built, the absence of a coercive discipline in terms of "being good," we expected a flow of "pleasure" answers. The responses we got, instead, have led us to a rather thorough re-thinking of our conceptions. This, after all, is one of the values of a test of this type.

These South School children gave significantly fewer "pleasure" responses, and significantly more indicating happiness in freedom from school restraints. And they gave just as many as the North School children indicating a tie-up between goodness and happiness.

In their "pleasure" answers, food and parties are in the lead, comprising exactly half of the replies. Play and use of materials are much less important, making up a little more than one-fourth of the replies. This is a different picture from that in the North School, where food and play were of approximately equal significance.

What does all of this mean? One can perhaps point to one obvious explanation of this last point—that food and parties were mentioned more frequently in this school than play or painting or crayoning, as ingredients of pleasure. In the South School, play (or paints or work with clay or blocks) is something that every first grade child does for a large part of every day. Though such activity is gradually becoming an important part of the North School program, still it does not figure so largely at the core as it does in the South School. For the North School children, play is still a treat. In the South School, it is taken for granted, and thus might not occur to the children in this particular context, as something that makes them happy. We are not usually aware that our breathing is a source of well-being to us.

What can we make of the large number of answers seeming to indicate that these children feel a need to burst away from school restraints? To understand these responses, they should be examined in detail:

"(She) turned around." (Questioning brings that the children like it when she turns around.)

"She might have let them do what they wanted to." (Two answers.)

"Didn't let them do any more work."

"Maybe they're not staying in school so long."

"Cause they don't have to do any more." (Questioned if this means work, reply is "Yeh, reading and writing.")

"Let them . . . talk together."

There are several possible interpretations, which we will only suggest tentatively at this point, discussing them more fully when we have examined the Free Choice Question, which is the other one in this general area of "happiness."

It seems quite likely that these South School children may be responding in this question as though they recognized the pictured situation as a *public* school situation, and not their own. They may have picked up some

of the traditional school mores relative to hating school, liking to go home early, etc.

On the other hand, there is also the fact that the whole question of "control" is more in the air in a school like the South School, where the problems relative to it are being lived through and worked through constantly. The responsibilities, burdens, and freedoms of the South School kind of control may be finding a certain reflection here.

Another surprise at the South School is the fact that the idea of goodness entering into happiness appears in approximately the same proportions as at the North School. This raises fundamental questions for educators, which we shall discuss after examining the Free Choice Question.

Before proceeding to this question, however, we should note one extraordinary reply among the South School replies, standing entirely by itself. "I know! She didn't give them anything to do. Maybe they're bad and they're glad they're bad 'cause they don't have to do anything."

## 2. Free Choice

*Explanation:* "The teacher is telling this little boy and girl that they can do *anything* they want to now. What do you think they'll choose to do?"

Though the wording of this question makes it in reality a somewhat different situation from that in the Happy Children, where the children were asked to tell what the teacher did to make them happy, still the idea of pleasure is involved here, and the responses fall into the same large categories used on the Happy Children. Furthermore, they are distributed in almost exactly the same way—that is, the pleasure idea dominates. However, the things that the children choose for pleasure on this question are not identical with those that came to light on the Happy Children. Nor is there reason why they should be. This is a different situation. Here children are in reality asked to choose what they like best to do. On the Happy Children they were asked to tell what they like to have the *teacher* do to

TABLE 8  
FREE CHOICE

	C N=25+1	A N=25+1	B N=18+4	BB N=23+3	North N=91+9	South N=25+2
Pleasure	.77	.77	.73	.73	.75	.74
Compliance	.19	.15	.18	.15	.17	.03
Freedom from Restraints	0	.04	.09	.12	.06	.19
X	.04	.04	0	0	.02	.03

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Pleasure	.77	.77	.73	.73	.75	.74
Compliance	.19	.15	.18	.15	.17	.03
Freedom from						
Restraints	0	.04	.09	.12	.06	.19
X	.04	.04	0	0	.02	.03

make them happy. Moreover, the fact that the children in the Happy Children were seen seated around a table structured the whole situation in a different manner (and possibly explains the importance of the food and party idea).

By far the most popular choice among the North School children, appearing in a little less than half of the pleasure responses, was what we have called "Use of materials," i.e., "Build with the blocks," "Draw," "Woodwork."

"Playing", or "playing games" was about half as important. Another significant block of responses, only slightly less important, fell into a category that we call "dramatic play." This differs from just plain "play" in that the child specifies playing in the house, or store, playing garage or train, etc. (These answers clearly refer to the opportunities for such "dramatic play" provided in the program and classroom set-ups in this school.)

A very few children mentioned musical activities such as are a part of their rhythms, and a few mentioned various kinds of schoolwork (see Table 9).

TABLE 9  
FREE CHOICE: BREAKDOWN OF PLEASURE

	C N=26	A N=24	B N=23	BB N=24	North N=97	South N=23
Dramatic Play	.11	.33	.17	.08	.18	0
Play and Games	.23	.29	.17	.25	.24	.22
Use of Materials	.54	.25	.39	.46	.41	.52
Music Games	0	.08	.04	0	.03	0
Trips	0	0	0	0	0	.04
School Work	.04	.04	.17	.17	.10	.17
X	.08	0	.04	.04	.04	.04

On the whole, the answers on this question fit into the picture we were led to expect from responses on the Happy Children. That is, ideas of happiness revolve chiefly around the concept of pleasure, though the idea of goodness is an ingredient in this pleasure also (appearing to the extent of 21 per cent, as indicated in Table 10).

TABLE 10  
FREE CHOICE: COMPLIANCE AMPLIFIED WITH THE IDEA OF GOODNESS

	C N=27	A N=27	B N=24	BB N=27	North N=105	South N=30
	.22	.19	.25	.19	.21	.13

The South School children choose a great deal more according to the idea of pleasure (74 per cent) than they did on the Happy Children (52 per cent,) though still their choices to free themselves of school restraints are significantly more than we find in the North School. These replies are very similar to those on the Happy Children question, and include:

"Playing around, talking"

"Go home"

"Eat candy and gum"

"Go outside and play. That's what I always like. I don't like to work."

The South School children seem less concerned with the matter of being good, when confronted with this question, than they were on the Happy Children. Only one child gives such a response on this question (as against four children on the Happy Children). But the total "idea of goodness," as it appears in all the comments, is practically as important on this question as it was on the Happy Children. One such supplementary comment is, "Because they helped the teacher and did everything she said. They were very good." The 13 per cent of such replies at the South School is not significantly less than the 21 per cent at the North School, though certainly in the direction of less.

Among the pleasures, these South School children, just like the North School children, choose some kind of work with materials first of all, and secondly to "play" or "play games."

Interestingly enough, there are no choices at all for dramatic play, but this is understandable in view of the fact that the South School program was not set up like that at the North School, with a play house or store in one corner of the room. The South School children had plenty of opportunity for "dramatic play," of course, but it was provided for in an entirely different way, largely in connection with the block building activity, which had a scope and importance that was unknown in the North School, and in fact, constituted the major indoor activity of the children. Also dramatic play was provided for on the playground, as was not the case at the North School.

However, it should be noted that not one of these children mentioned blockbuilding among the choices. Crayons, paints, clay, and woodwork were the materials chosen. But again, one must see this situation in its whole context before making final judgments. Blockbuilding was always a large group activity in the South School. Here in this picture we are shown only *two* children. It is quite logical to assume that *individual* activity is what is called for here.

A fairly sizeable number of the pleasure replies—about one-third as many as for use of materials—were in favor of school work. (At the North School there were only one-fourth as many as for use of materials.) Such replies were "Study," "Read," "Read a book." Are these activities (which, after all probably represent wishful thinking, since they are not included in the actual school program) tinged with a glamour which they don't have for the North School children?

One of the unclassifiable replies coming from the South School should be described in detail, since it seems rather typical of the keen insight which these children habitually displayed, not only in their responses but in their peripheral comments:

"Well, she shouldn't have said that they could do *anything!*" Here the child sees the possibility of trouble arising and questions the wisdom of this teacher! When he goes ahead to answer the question, he has apparently studied the picture very closely and taken a cue from it, with keen observation. "I think he wants to fight 'cause he's starting to make a fist and he's happy." (I ask then what the little girl wants to do.) "Well she looks like she wants to fight too, 'cause look—" He points to her hand which certainly does appear to be doubling up as a fist!

What can we say in summary about the children's ideas of "happiness" in school, as revealed in their responses to these two questions?

Certainly by and large, it is the child-like spontaneous pleasures that emerge most importantly in their responses, as one might expect—the pleasures of presents, of receiving gifts and surprises and having parties. It is the sympathetic, *giving* teacher they want, (corroborating, in a sense, the concept of Teacher that they have framed in the two questions in the Trouble area). And also they want the pleasures of playing, of making and doing. It is interesting that this appears as a conscious free choice—since educators have for years been arguing and urging that this is so, that active playing and doing are among the fundamental needs of young school children and should be recognized in the kind of curriculum that is offered to them.

However, though pleasures and play are predominant, the concept of goodness as related to happiness is important enough in both schools to filter through even in the picture orientated toward free choice. What are the implications of this, for educators? One asks, in the first place, whether in our desire to escape from the rôle of censor in the children's lives, we have really recognized to what extent the children use us for this purpose? And to what extent they may have a fundamental *need* to feel right and good in the eyes of adults?



In our zeal—which stems from the light of modern psychological findings—our zeal to keep children spontaneous and to see them develop the kind of satisfactions that come from their own making and doing rather than from what may be artificial efforts to please adults, have we tended to lose sight of the other half of the picture, which involves the need to feel not guilty, not bad, but good? Of course, there are many ways of defining “goodness”. In these two questions we made no attempt to delve into the children’s exact definitions of this concept. This will follow in the questions in the Good and Bad Behavior areas.

What can we make of the South School children’s emphasis on the need to burst away from school restraints, which is so evident in both the Happy Children and Free Choice questions? As we have already suggested, does this stem from the fact that the whole problem of control is being lived and worked through constantly at the South School, probably a good deal more than at the North School, where the teachers are just beginning to loosen up the edges of the traditional authoritarian approach? The South School children, within themselves, are involved in very active growth in the areas of social relations, development of independent judgment, control of impulses. In a free atmosphere, this kind of growth is catalyzed. There is more opportunity for experimentation and error, and more touching and testing of limits. Restraints are less rigid and not so thoroughly embedded in the structure of the teacher-child relationship. It is natural to expect, therefore, that they will be prominent and very much part of the consciousness of the children and teachers.

Still another question can be asked in this connection, and it is probably one of the most pertinent of all. Is it possible that out of their free atmosphere these South School children simply have more *courage* to express their resistance than we find at the North School? Where there is a strong conscious drive toward genuinely democratic living, there is room for the expression of criticism.

Or, again, is it possible that we are misinterpreting some of these answers? Does a response such as “Let them do what they wanted” merely indicate pleasure in free choice—a free choice which certainly is not always possible in their large classroom, where the procedures for 30 children must be rather carefully organized? It may be that the South School children, used to freedom in their homes and in nursery schools, feel more keenly the loss of some free choice in an organized classroom than do the North School children, who probably come to school with less expectation of freedom in their classrooms. Of course, there is the possibility that we have made

too much of the freedom we give children, with the result that they consciously feel too much of a need to defend their independence.

We must not lose sight of another possibility, however, that these bursting away from restraint answers may simply reveal that the South School children were answering, as they thought, according to traditional school mores. They bring in unrealistic responses, too, when they refer to studying and reading and writing, which have no place in their curriculum. It may be that on these two questions some of the South School children are not giving answers that reflect their own thoughts and feelings about their actual situation, whereas the North School children are identifying more completely with the pictures and answering more realistically. This did not seem to be the case in the Trouble area, where it seemed more likely that it was the North School children who were projecting their feelings to some extent and not revealing their actual situation entirely realistically.

### C. AREA: GOOD BEHAVIOR

#### 1. *The Good Girl*

*Explanation:* "Here is a teacher in school, and here is a little girl in school. The teacher is telling her she's been a good little girl. See how she's smiling, and how happy she looks? Now you guess what she did that was good."

The replies to this question indicated large concepts of "goodness" on two different levels, or in two camps. On the one hand, goodness was conceived of as a kind of compliance to the rules, a blind obedience, expressed usually in one of three ways: (a) A general, non-specific over-all matter of "behaving," or doing what the teacher says, or being good in school; (b) keeping quiet; (c) assuming some body attitude that will help keep the school atmosphere from becoming ruffled: "Sit at the desk quietly." "She fold her hands." In addition, there were always a few miscellaneous kinds of compliance expressed. On the other hand there was a value attached to (a) doing school work well, or other pieces of work which the teacher would value as accomplishment, i.e., "She did good work," "Made some nice pictures," (b) Or there was value attached to behavior in the area of social or human relations, where the child helps the teacher, plays nicely, takes responsibility in the classroom: "She might have helped the teacher look for her pencil or eraser," "She helped somebody," "She was very kind with the children."

As Table 11 shows, taking the North School responses as a whole, compliance is an ingredient of the majority of them (59 per cent.) Breaking

TABLE 11  
THE GOOD GIRL

	<i>C</i> <i>N</i> =24+4	<i>A</i> <i>N</i> =24+3	<i>B</i> <i>N</i> =17+3	<i>BB</i> <i>N</i> =21+3	North <i>N</i> =36+13	South <i>N</i> =24+1
Compliance	.57	.77	.60	.42	.59	.44
School Work	.29	.19	.35	.46	.31	.28
Helping (Social Relations)	.14	.04	.05	.12	.09	.23

TABLE 12  
THE GOOD GIRL: BREAKDOWN OF COMPLIANCE

	<i>C</i> <i>N</i> =21	<i>A</i> <i>N</i> =23	<i>B</i> <i>N</i> =15	<i>BB</i> <i>N</i> =10	North <i>N</i> =69	South <i>N</i> =11
General	.52	.43	.33	.20	.41	.45
Keep Quiet	.19	.43	.40	.40	.35	0
Sit Still	.23	.13	.20	.10	.17	0
Good at Rest	0	0	0	0	0	.18
Steady	0	0	0	0	0	.27
School on Time	0	0	0	0	0	.09
Others	.05	0	.07	.30	.07	0

this compliance down into its component elements, the general one "blind obedience" is most often mentioned, comprising more than a third of the compliant replies, and expressed as "She do what the teacher say," "She behaved," etc. Keeping quiet or not talking are almost as important, but folding hands and sitting still are mentioned only half as much (see Table 12).

A great deal less important than obeying and behaving is the concept of goodness in connection with accomplishment or doing one's school work, mentioned in 31 per cent of the responses. All but two children, it should be added, express this value in terms of lessons, using this word "lessons," or expressing it as "She did her work good," "She read good," "Writing," "Do her homework good," etc. The two exceptions (both pupils of the *BB* teacher) have the unusual and certainly very desirable concept of accomplishment in terms of making good pictures, and showing pictures to the class.

Goodness in terms of human relations is relatively unimportant, occurring in only 9 per cent of the thinking. Replies in this category are about equally divided between teacher-child and child-child relations.

By and large, at the North School, it appears that the little girl is good when she behaves, keeps quiet, and does her lessons. There is even one comment which sounds a note of the familiar themesong at the North School: "If she was bad she wouldn't be happy."

However, we are not being entirely accurate if, on this question, we lump all the North School children together, when clearly one group stands

out from the others as different. In the *BB* group, goodness is conceived of as "compliance" considerably less than in the other groups, while the various forms of school *accomplishment* loom much larger than in the other groups. Moreover, among the replies classified as compliant, we find at least one with a very special flavor—"Coöperate." As we saw in the two questions in the Trouble area, the children of this *BB* teacher seem to be considerably closer to the South School children than the others at the North School.

At the South School, on this question, if we compare the answers with the North School as a whole, we find less thinking in terms of compliance to school rules (44 per cent), though this is not a statistically significant difference. The important thing about it is that it is never expressed in terms of keeping quiet or sitting still. It is expressed either in a general way, such as "Behaved well," "She did everything the teacher said," or in specific miscellaneous ways that are peculiar to this school on this question, i.e., "Good at rest period," "Musta came to school on time," "Be steady." (Note that the amount of compliance is approximately no more than we found in the *BB* group.)

It is an open question whether or not being "steady" means anything more to the South School child than "being good" means to the North School child. It is an expression that is used by the South School teachers in the attempt to get away from the blind obedience concept of goodness, to make it explicit and reasonable, in a way that will help the child take some responsibility for his behavior. Because this is the aim—whether or not it gets across to the children—we have not considered these "steady" answers in quite the same class of compliance as the "behaving" and "be good" answers.

The concept of goodness in relation to school work or other accomplishment valued by the teacher appears in only slightly smaller proportions at the South School (28 per cent) than at the North (31 per cent). And just as at the North School, the concept is largely in terms of "work" or good reading, writing, or arithmetic. (Remember these South School children do not have reading, writing, and arithmetic in their curriculum.)

When we look at the category having to do with helping and good social relations, however, we find 28 per cent of the children's answers given over to these concepts, which is significantly more than at the North School. These are largely in terms of helping the teacher or doing some job in the schoolroom: "She might have erased the blackboard," "While the teacher was out maybe she took care of the room."

The South School children see the little girl's goodness in terms of behaving, doing good school work, and helping the teacher.

The big difference between the two groups is that social relations are more important to the South than to the North School children, and the emphasis on compliance is in the direction of less, though not with a statistically significant difference. The qualification should be made, however, that the children of the *BB* teacher strongly resemble the South School children in their lesser emphasis on the kind of goodness that may be called compliance. Also significant is the fact that keeping quiet and sitting still do not figure as values at the South School at all.

It would appear that we have here a reflection of the actual practices in the schools, to some extent. Certainly it was our impression that the *BB* teacher, more than any of the others was striving to put across values that resembled those we were familiar with at the South School.

Yet, neither her children nor the South School children take over their teacher's values all the way. That is, at the South School, only 27 per cent of the compliant replies are expressed as "being steady," whereas 45 per cent refer to the more blindly obedient matter of "behaving." And in the *BB* group there is only one child who responds with "coöperate."

Also, as we have pointed out before, it certainly is not the teacher's intentions in the South School that the children shall think in terms of reading, writing, and arithmetic at all, in this first grade. Again we ask the questions, do these children do so because they wish they *were* having a chance to learn these things? Or do they give such answers because they do not identify this pictured situation as their own?

Though we found, in the Happiness questions, that children in both schools place approximately equal emphasis on goodness as an ingredient of happiness (with the North School a little in the lead), we find here that the definition of "goodness" is certainly not the same to the children of all teachers. The *BB* and the South School children's concepts have a qualitative flavor that springs from a basically different child-adult relation. Goodness is not just blindly obeying, doing the adults' bidding, but depends also on active, creative accomplishment, or achievement, in the areas of school work and human relations.

## 2. *The Praise Card*

*Explanation:* "Here's a little boy getting a praise card, isn't he?  
What do you think he did to get the praise card?"

(In the case of the South School children who know nothing about

praise cards, the card was explained to them as something the teacher gives the children when they have done something to be praised for. The words "good" and "fine" were also used to elaborate on this.)

Replies on this question may be analyzed in exactly the same terms as on the Good Girl question, and in almost every way the results corroborate the findings on that question.

Taking the North School responses together, by far the majority of them (69 per cent) express the idea that the praise card is given for compliant, obedient behavior (see Table 13). And just as on the Good Girl question, about one-third of these compliant replies are in terms of a general, over-all doing what the teacher says, though keeping quiet and sitting still are also important concepts (Table 14). One difference shows up here, however. In the case of the Good Girl, she was thought of as being good for

TABLE 13  
THE PRAISE CARD

	<i>C</i> <i>N</i> =25+6	<i>A</i> <i>N</i> =26+2	<i>B</i> <i>N</i> =20+5	<i>BB</i> <i>N</i> =23+1	North <i>N</i> =94+14	South <i>N</i> =25+3
Compliance	.74	.85	.64	.50	.69	.50
School Work	.19	.07	.24	.38	.21	.25
Helping (Social Relations)	.06	.04	.12	.12	.08	.18
X	0	.04	0	0	.01	.07

TABLE 14  
THE PRAISE CARD: BREAKDOWN OF COMPLIANCE

	<i>C</i> <i>N</i> =33	<i>A</i> <i>N</i> =30	<i>B</i> <i>N</i> =19	<i>BB</i> <i>N</i> =13	North <i>N</i> =95	South <i>N</i> =14
General	.39	.50	.26	.23	.38	.64
Keep Quiet	.15	.17	.26	.23	.19	0
Sit Still	.27	.27	.37	.23	.26	.07
Steady	0	0	0	0	0	.29
Others	.18	.06	.10	.30	.15	0

quietness more than for sitting still. In the case of this boy, he is praised for sitting still slightly more often than for being quiet. Is this a real sex difference in behavior, which the children have caught on to?

Praise for accomplishment such as school work is even less important (21 per cent) than it was for the Good Girl, and with the exception of two replies (concerning bringing salvage papers to school, and painting nice pictures) is expressed in terms of "work" or reading, writing, and lessons.

The concept of good behavior in the realm of social relations is of no more importance here than it was for the Good Girl.

Thus we see that the little boy is given a Praise Card because he is good, does what the teacher says, sits still and folds his hands, and less importantly, because he does good work, keeps quiet, and plays nicely with the other children.

The expressed hope of the teachers at the North School, in giving the Praise Card, has been to have it serve as a recognition of accomplishment for the particular child to whom it is given—positive creative accomplishment and progress, and decidedly *not* as a reward for “being good.” That is, if the children answered on this question as the teachers would like to have had them answer, the majority of the replies would have been in the accomplishment and social relations areas—praise for painting good pictures, praise for taking responsibilities and helping, and coöperating.

What does it mean that the children conceive of the reward so largely in terms of compliant obedience? Have the teachers actually given the Praise Card for good behavior more often than they realized? Do the children interpret it this way regardless of the teacher’s efforts to get a different idea across?

Even the *BB* children, who, on this question just as on the Good Girl, stand somewhat apart in their replies, with much less mention of compliance than the other groups, and more emphasis on accomplishment—even these children are far from free of the idea, though to be sure, their answers do deserve special consideration because of their special flavor. Two of these children explain the praise as a result of “coöperation,” while another answer also has a special flavor, above and beyond blind compliance: “Mind his own business.” (It should be noted that the children of the *B* teacher, who of course is the same person as the *BB* teacher, functioning a year earlier, also reveal attitudes on this question that are in the direction of *BB* and the South School.)

The South School replies on this question also corroborate the results on the Good Girl picture. Here, too, we have less compliance expressed (50 per cent) than at the North School, though not with a statistically significant difference (the level of confidence is .058), and keeping quiet and sitting still are foreign concepts to these children. There is only one such reply, “He sat quietly.” Just as on the Good Girl question, a general kind of obedience, such as, “He minded the teacher,” and being “steady” are the chief ingredients of compliance.

School work is just about as important (25 per cent) as it is to the North

School children, but Social Relations are more so. The difference here is not a statistically significant one, as on the Good Girl question but the trend is certainly in this direction. These replies include concepts of relations with children: "Played very nicely," "Helped somebody," as well as relations with teacher—"Maybe he made a little pin out of clay for the teacher."

Summing up the findings on these two pictures concerning praise, we can say that by and large the children at the North School expect praise for compliant, obedient behavior to a greater extent than the South School children, and that concepts of praise in the area of human relations seem less important at the North than at the South School. Though the South School children do consider compliant, obedient behavior important, they almost never conceive of it in terms of keeping quiet and sitting still. "Goodness" is important to both groups of children, but has different emphases.

These results seem to indicate that to some extent, at least, the children's answers are here reflecting the actual practices and atmospheres of their schools. At the South School, certainly, the concepts of coöperation, responsibility, and good social relations are basic in the values that underlie all the practices in the school; and certainly "keeping quiet" and "sitting still" have received very little emphasis as values per se. In fact, the South School does not *want* its children to keep quiet and sit still. It wants just the opposite, because it believes that only when young children are free to move about and talk can they have a spontaneous constructive school life.

But have we not also said that the teachers in the North School allow and encourage a great deal of freedom, that they are progressive and forward-looking, and have values for children that are a far cry from the old-fashioned public school standards of behavior? This is true, yet that these values are entirely comparable to those at the South School is not the case, except in the case of the *BB* teacher whose children clearly seem to reflect her influence. It must be remembered, too, that the North School teachers were operating within the large framework of a complicated city system where there was not unanimous acceptance of activity and freedom in the classroom.

This difference between the responses of the children in the two schools, in the matter of "compliance," is in the direction one would expect. At the same time, it is a little surprising to find compliant, obedient behavior so overwhelmingly important in the North School, and it is also surprising, perhaps, to find it figuring as largely as it does at the South School. At neither school do the teachers seem to be getting their values across 100



per cent. Do these compliant answers reflect certain pressures that the children are bringing to school with them? Is this a case, as also perhaps in the Trouble area, where we are encountering some projection of feelings rather than complete reflection of real practices in the school? Certainly it is likely that in the *home* atmospheres of the North School children we would find compliant obedience present as a value to an overwhelmingly greater extent than in the home atmospheres of the South School children—sufficiently present to account for a good deal of the expectations that the children bring to school.

The important possibility must not be overlooked, however, that a teacher, by her own attitudes and values, can to a measure break through the projections and false expectations and implant her realities. Certainly the *BB* teacher seems to be doing this to some extent.

As we have pointed out before, it is likely that we are encountering some projections of feelings—or wishes or beliefs—among the South School children also. In the Happiness questions we found an emphasis on academic work that does not stem from any reality in the classroom. That emphasis is here in these two questions also.

Another "thread" that appeared in the Happiness area can be picked up here, too. In discussing the implications of the "be good" answers, we suggested that as adults we may not realize how much children use us for the censors in their lives. It appears in these two Good Behavior questions that we also may not realize to what extent children at this early stage of their development tend to interpret our values in the simplest terms of what is "good" regardless of what terms the teachers put them in, in their attempt to stress creative accomplishment, responsibility, coöperation, "steadiness," and so forth.

Before proceeding to the pictures in the bad behavior area, we should note that the Good Girl and the Praise Card pictures are not entirely comparable. The Praise Card situation in both schools brings forth *more* responses having to do with compliant, obedient behavior. Is this tied in with a long tradition of tangible rewards for just this very thing?

#### D. AREA: BAD BEHAVIOR

##### 1. *The Gold Star*

*Explanation:* "Here are some children getting ready to go home. See, they have their hats and coats on. And the teacher is giving them some gold stars—see? (pointing.) But this little girl is crying. She didn't get one. Why didn't she get one?"

Practically every child, at both the North and South Schools, had a ready answer for this question, and in practically all cases it was expressed in the same three words, "She was bad," or "She was naughty," with one or two rare variations such as "She wasn't good."

Because we were not satisfied to stop there, and wanted more specific concepts of badness or naughtiness, we proceeded, after this stock answer, to ask the child what the little girl did that was bad, if the child himself did not elaborate on his statement of his own accord. It is the replies after this interrogation that we are considering in this analysis.

Such replies fell into approximately the same types of classification that were used on the "good behavior" questions (Good Girl and Praise Card). There were concepts of "badness" as non-compliance, either of a general sort, or specific in terms of not keeping quiet and sitting still, or other rare miscellaneous ways. In addition, the little girl was thought of as failing to get the gold star because of some shortcoming in relation to her school work: "Didn't do her work," "Didn't finish her reading."

Then there were replies which seem to fall in the area of social relations, though they do not take the forms they did on the good behavior questions. The little girl is not "bad" because she fails to help the teacher or take responsibility in the room, but for aggression against the children (fighting or hitting them), or against the teacher (making a face at her). It should be explained, however, that this latter idea might not have occurred to the children if we, in administering the test, had not inadvertently suggested it. In the order in which the pictures were shown, this picture followed fairly closely on the heels (with only one other in between) of the first picture in the punishment series, which shows a little girl making a face at the teacher behind her back. Because of this circumstance, not too much weight should be given to these replies.

At the North School, only five children out of 94 did not reply to this question with the stereotype, "She was bad" (or "naughty"). A sixth child varied it slightly in an interesting way, "'Cause the teacher thought she was bad."

When this concept is broken down, almost exactly half the replies (51 per cent) express non-compliance, about equally divided between the sins of a general sort of disobedience ("She didn't obey the teacher,") and the sin of making noise, with just an additional sprinkling of miscellaneous misdemeanors, as well as of the misdemeanor of not sitting still (Tables 15 and 16).

Of the 28 replies (27 per cent) that fell in the category of aggression

TABLE 15  
THE GOLD STAR

	<i>C</i> N=25+3	<i>A</i> N=26+1	<i>B</i> N=20+3	<i>BB</i> N=23+1	North N=94+8	South N=25+2
Non-Compliance	.64	.59	.39	.38	.51	.44
School Work	.14	0	.09	.13	.09	.22
Aggression Teacher*	.11	.30	.30	.41	.27	.26
Aggression Children	.11	.11	.21	.08	.13	.07

\*These replies have doubtful significance, largely consisting of "making faces," which was suggested by a previous picture.

TABLE 16  
THE GOLD STAR: BREAKDOWN OF NON-COMPLIANCE

	<i>C</i> N=20	<i>A</i> N=18	<i>B</i> N=9	<i>BB</i> N=9	North N=56	South N=13
General	.35	.50	.11	.33	.36	.46
Noise	.30	.39	.55	.33	.38	.08
Not Sitting Still	.20	.05	.11	.11	.12	0
Others	.15	.05	.22	.22	.14	.46

against the teacher, all but five were in terms of making a face at the teacher. These five concerned talking back at her, bothering her, and being mad at her.

Aggression against children, always expressed in terms of fighting or hitting, was relatively unimportant, figuring in only 13 per cent of the replies.

The concept of badness in relation to school work was even less important (9 per cent), and was never expressed really in terms of academic failure. It was decidedly not the "dunce hat" idea, but in six of the nine instances was expressed in almost exactly these words, "She didn't do her work." Two other concepts had to do with talking during reading, and not finishing reading, while the other was "She didn't draw." Note that none of these has to do with doing poor work, or not knowing how to read, etc. The era of dunce hats, fortunately, does seem to be over.

Thus, at the North School the thinking on this question is very clear. The little girl fails to get a gold star because she is bad, and she is bad because, chiefly, she doesn't do what the teacher says, she talks and she sometimes hits (and possibly makes faces.) Failure to sit still is a rare concept, only slightly less important than failure to do her work.

However, just as on the Good Behavior questions, the *BB* group (and indeed the *B* group as well), if examined separately, stand a little apart, with less emphasis than some of the groups on non-compliance.

Of the 25 children at the South School, there is only one who does not begin with the stereotype, "She was bad" (or naughty,) and this exception is only a slight variation: "Because she wasn't good for the whole day."

In almost all other ways, as well, the responses at the South School shape up as they did at the North School, without large significant differences. That is, a little less than half of the replies (44 per cent) are in terms of the sin of non-compliant behavior. Next in importance (26 per cent) are the replies having to do with making a face at the teacher. Six out of the seven replies that are in terms of aggression to the teacher are expressed in this way; failure in relation to school work is mentioned in 22 per cent of the replies, which appears to be somewhat more than the 9 per cent at the North School, though is not significant on the 5 per cent level of confidence. (Interestingly enough, several of these schoolwork replies do contain some of the dunce hat element: "She did her work' wrong," "Bad in spelling," "Didn't write good.") Aggression against children (always in terms of hitting and fighting) is minor, mentioned in only 7 per cent of the replies.

The outstanding difference between the two schools shows up when we break down the "non-compliance" category. At the North School, it will be remembered, non-compliance was conceived of chiefly in two ways, as a general sort of disobedience and as the specific sin of not keeping quiet. At the South School the "general" sort of disobedience is important but with even more weight, and in the same terms, "Maybe not paid attention," "She didn't do what the teacher told her to." (No instances of "steady.") But *talking* as a misdemeanor scarcely appears at all. In fact it is mentioned by only one child. Instead, the South School children think of a wide variety of specific offenses which we have classified as "miscellaneous" simply because there was no other place to put them. In fact, there are as many of these replies as there are of the general type of non-compliant responses, significantly more than the few classified as miscellaneous for the North School. Among these replies for the South School children are, "Made the teacher call her three times," "Maybe she didn't rest well," "She might have spilled paint all over the floor or something," "When the teacher wasn't looking she might have gone up to the blackboard and crossed out some of the letters."

Thus, at the South School, the little girl is bad because she doesn't do what the teacher says, and she disobeys or makes trouble in a variety of miscellaneous ways, as well as doing bad school work (and perhaps she makes faces at the teacher). She rarely hits.

The only big difference between the schools is that at the South School

various miscellaneous acts take the place of the misdemeanor of the talking at the North School, and there is some indication of more importance attached to school work.

Because some of the replies in connection with school work at the South School contain the "dunce-hat" idea, so very foreign to all basic philosophies and practices at this school, one asks as before, whether these South School children were not really identifying this Gold Star situation as their own, but were answering as they thought children might answer in schools where Gold Stars are given. Possibly the fact that no "steady" answers were given is another indication that this might have been the case.

What are the findings when we compare the replies for this Bad Girl with those for the Good Girl? Are the replies interchangeable? For instance, is compliance as important when the children are thinking about good behavior as it is when they are thinking about bad behavior?

At the North School, as Table 17 shows, the Good Girl's behavior is

TABLE 17  
COMPARISON OF GOOD GIRL WITH BAD GIRL.

	North		South	
	Good Girl	Bad Girl	Good Girl	Bad Girl
Compliance or Non-Compliance	.59	.51	.44	.44
School Work	.31	.09	.28	.22
Social Relations	.09	.40	.28	.33

conceived of as compliance slightly *more* than the Bad Girl's is as failure to comply. At the South School, on the other hand, the compliance is equal on both questions. However, this does not mean that bad behavior is conceived of as the exact converse of good behavior at the South School. This is not quite the case at either school. Badness is never expressed as *failing* to help the teacher, nor is goodness usually expressed as *not* hitting or fighting, though an occasional "playing nicely" perhaps carries implications of it.

Another interesting contrast that comes to light when the Good Girl and Bad Girl concepts are studied side by side is the difference between the implied values when we combine the School Work and Social Relations categories. At the North School, Compliance looms larger than School Work and Social Relations together on the Good Girl question, though not on the Bad Girl. At the South School, on the other hand, Social Relations and School Work are more important than Compliance, on both questions. It seems significant that this area should loom importantly in the thinking

on good behavior just as on bad behavior. In this respect these South school children seem to have integrated more social ideals than the North School children have, though one must be careful not to impute this entirely to the influence of their school. It may simply be evidence of somewhat greater development in social relations within the whole constellation that makes up the life of these children.

## 2. *Boy in the Corner*

*Explanation:* "Here's a little boy who has to go sit off in the corner, because he did something bad. What do you think he did?"

The responses relative to this "Bad Boy" fall into the same categories as the responses about the "Bad Girl" (Gold Star picture), with the exception that one new kind of reply appears here in what may be thought of as the social relations area. This Bad Boy not only hits and fights children, but he has what we have called "bad relations" with them. That is, he bothers, disturbs, grabs from them, messes up what they are doing, and doesn't play nicely.

Briefly reviewing the categories, then, the boy is put off in the corner for two large types of offenses: (a) a failure to comply and obey (expressed as a general sort of not minding, or as failure to keep quiet and sit still, and other miscellaneous ways); and (b) for badness either in relation to school achievement or human relations, aggressing against teacher and children, or behaving in a way that indicates bad relations with the children.

To the children at the North School, non-compliance is not considered the little boy's misdemeanor as frequently as it was in the case of the Bad Girl (Table 18). Only 32 per cent of the thinking involves this concept here. (Compare with 51 per cent for the girl.) The chief ingredient of the non-compliance mentioned here is talking and making noise, with a minor scattering of failure to sit still and general disobedience, such as "didn't listen to the teacher," and a few miscellaneous concepts (Table 19). The *BB* group, though—and to a lesser degree the *B* group—can scarcely be included in this summary. Here, as before, non-compliance is of much less importance than in the other groups.

Aggressing against children is the chief fault of this boy, expressed by exactly half the children, and no longer is it limited to just hitting, fighting, as it was in the case of the girl, but it includes quite a variety of kinds of aggressive roughness, such as biting, hitting with a stick, throwing something and hurting somebody, pushing, smacking, making somebody cry, pinching, and several times it is specified that the boy has hit a little girl.

TABLE 18  
BOY IN THE CORNER

	<i>C</i> <i>N</i> =24+4	<i>A</i> <i>N</i> =26+3	<i>B</i> <i>N</i> =19+3	<i>BB</i> <i>N</i> =22+1	North <i>N</i> =92+11	South <i>N</i> =25+3
Non-Compliance	.41	.45	.27	.09	.32	.11
School Work	.03	0	.04	.04	.03	.18
Aggression Teacher	.14	.03	0	0	.05	.07
Aggression Children	.34	.48	.50	.48	.45	.32
Bad Relations	.07	.03	.18	.34	.14	.32
X	0	0	0	.04	.01	0

TABLE 19  
BOY IN THE CORNER: BREAKDOWN OF NON-COMPLIANCE

	<i>C</i> <i>N</i> =15	<i>A</i> <i>N</i> =14	<i>B</i> <i>N</i> =8	<i>BB</i> <i>N</i> =2	North <i>N</i> =19	South <i>N</i> =3
General	.20	.21	0	0	.15	.33
Noise	.40	.36	.63	1.00	.46	0
Not Sitting Still	.26	.14	0	0	.15	.33
Throwing Blocks	0	.21	.12	0	.10	0
Others	.13	.07	.25	0	.13	.33

"Bad relations" with other children are important only to the extent of 14 per cent. Frequently this concept is related to the woodworking shown in the background of the picture, with replies such as, "Tried to take wood from the children." But also there are a number indicating failure to play "fair" or "nice." Here again, though, it must be pointed out that the *BB* group differs in that it gives a great deal more importance to this concept than the other groups do—and the *B* group, as well, follows this trend.

Misdemeanors in relation to schoolwork, or aggressing against teacher, are of extremely minor importance. The instances of aggression against the teacher have nothing to do with making a face at her, but include fighting and hitting her, and spitting at her.

There is one special reply standing entirely by itself: "Said a bad word."

To sum up, in general at the North School the little boy had to be put in the corner because he was fighting, pushing, hitting other children, and because his behavior was lacking in the compliance expected of school children—he talked, and committed a few other sins such as jumping around and miscellaneous acts such as writing on walls and floor.) Also, less importantly, he did not have good relations with other children. He grabbed things away from them and didn't play nicely with them.

This is scarcely comparable to the thinking on the Bad Girl question. The little girl was deprived of the gold star not for all this roughness, but

chiefly because she didn't do what the teacher said, and she talked. Of course, the pictured situations are not comparable. The Gold Star tradition probably is one of reward for a general sort of nice behavior in school, whereas certainly a picture of a little boy sitting off in a corner with a teacher apparently scolding him suggests specific misdemeanors.

There is also the possibility that there is a real sex difference reflected here—that boys are the rougher ones and are seen as such by the children.

When we turn to the South School, we find that the little boy is bad chiefly because of aggression against children (32 per cent) and bad relations with them (32 per cent.) What we have called "non-compliant" behavior is relatively unimportant (11 per cent,) with the sin of "talking" conspicuously absent (and no instances of failure to be "steady"). Badness in relation to schoolwork is somewhat more important than non-compliance. It appears to the extent of 18 per cent—and as on the Gold Star Question contains some of the "dunce-hat idea, that is, a penalty for doing a thing in the wrong way. "Mighta hammered a nail in crooked"—though also we find such replies as "musta been talking while they was studying."

Thus at the South School the little boy is bad because of roughness with the children, expressed as "Hit someone over head with hammer," or "Shut the door on somebody's finger," (never with reference to hitting *girls*); also because of bad relations with the children—he was "bothering," "disturbing," "getting in the way" or taking someone else's woodwork. Likewise, he is bad because he "mighta hammered a nail in crooked" or didn't want to read and write.

This is somewhat different from replies on the Gold Star question because of the emphasis here on roughness and bothering and disturbing, the whole area of child-child relations growing out of protection of work and play, rather than on various forms of non-compliance. This is the same kind of contrast that exists at the North School on these two questions, but there are still some differences between the schools to explore.

There are some notable differences between the Bad Boy at the North School, and the Bad Boy at the South School. If we try to boil down to very brief terms what the boy at the North School did, we can say that he fought, and disobeyed. On the contrary, at the South School he fights and disturbs, and does something wrong in relation to his school work. Disobedience in terms of not doing what the teacher says, or talking, is much less important. Social relations in terms of getting along with others without grabbing, bothering, and disturbing, are much more important.

This particular emphasis does seem to reflect the actual philosophy of



the 'school. Even these words, "bother" and "disturb," come out of the teachers' mouths and are descriptive of aims that we do not find so much at the North School. We can still suggest, however, that some of the answers at the South School are not reflecting reality. The idea that punishment follows for hammering nails in crooked, or for not wanting to "read and write" is not entirely realistic. At the North School, on the contrary, there seems to be nothing on this particular question that is not a reflection of the actual situation.

Let us turn now to a comparison of the Good Boy with the Bad Boy, at each school, to see what this will reveal (Table 20).

TABLE 20  
COMPARISON OF GOOD BOY WITH BAD BOY

	North		South	
	Good Boy	Bad Boy	Good Boy	Bad Boy
Compliance or Non-Compliance	.69	.32	.50	.11
School Work	.21	.03	.25	.18
Social Relations	.08	.64	.18	.71
X	.01	.01	.07	0

We see that at both schools the idea of compliance is far less important for the Bad Boy than for the Good, whereas the social relations area looms into much greater importance in the case of the Bad Boy.

Here again, as on the Gold Star question, but much more strikingly so, we find that good behavior is not the converse of bad. A little boy does not get a praise card for refraining from rough play, but roughness is what he is bad for—or what he is put in the corner for, we should say. However, it is possible that if the Bad Boy picture had been more comparable to the Good Boy picture, the replies might have been more interchangeable. And we must remember that in the case of the South School children, a reward such as the Praise Card was entirely unfamiliar, and their answers may have been reflecting what they considered to be traditional mores.

At this point, let us try to pull together some of the threads that have been running through these four Good and Bad Behavior questions, and summarize briefly the significant findings:

1. Compliant, obedient behavior is a value more prominent in the thinking of the North than the South School children, with the exception of the *BB* group. The South School children, and the *BB* group, attach more importance to social relations in the classroom, and in the South School keeping quiet and sitting still are rarely reflected as values.

2. Though the above findings seem to reflect to a degree the actual

practices of the teachers and the atmospheres in the two schools, there is some indication that in neither school are the teachers getting their values across 100 per cent. That is, both the North and South School children seem to attach more overwhelming importance to compliant behavior as a source of praise than we believe is warranted in terms of the actual situation.

At the South School, moreover, the concept of being "steady," which the teachers use, is not mentioned by the children as much as the old-fashioned being "good" and doing what the teacher tells you. Also, these South School children throughout think in terms of values attached to academic school work, which is a far cry from the teacher's values for these children. Likewise, some of the values express the "dunce-hat" idea—penalty for doing one's work incorrectly—which it is very hard to believe has any actual counterpart in what goes on at the South School.

Such replies at the South School may indicate that these children were not always identifying these pictured situations as their own.

3. The good behavior situations that we pictured were not exactly comparable to the bad behavior situations. This partially explains why the children's concepts of "badness" as expressed in this test were not the exact converse of concepts of "goodness." Yet there is still room for teachers to ponder the possibility that the same stress is not laid on *good* relations with children that is put on *bad* relations. Is there a tendency to let children drift along with vague, unformed, and "traditional" ideas of goodness?

4. The almost universal answer to the Gold Star question, "She was bad," reveals, perhaps, the way children reduce their concepts to the simplest common denominator. What does it signify that even at the South School, where such a phrase is *never* used by the teachers, this was the immediate answer of practically all of the children? We have already suggested, in discussing the Good Behavior answers, that these young children may tend to reduce their concept of goodness to the simple expression, "good," regardless of how their teachers formulate it. This finding in the area of "Badness" gives further weight to this suggestion.

#### E. AREA: PUNISHMENT

##### 1. *Girl Against Teacher*

*Explanation:* "This little girl is making a naughty face at the teacher, isn't she? What do you think the teacher will do to her if she turns around and sees her?"

The "punishments" suggested not only for this little girl, but also for the other children in the punishment series of pictures, may be thought of as

belonging to one or the other of two large groups. In one group the teacher is responding with an overt *personal* reaction and feeling. That is, she either scolds, gets mad or cross, etc., or else she hits, slaps, spansks, or does something of equally violent nature, such as put the child in a dark closet.

On the other hand she may appear to be somewhat more impersonal. She resorts to the usual school controls such as putting the child in the corner, making him stay in, sending to the principal, telling mother, and numerous others of lesser significance. That is, one does not see her reacting with personal anger expressed in her own voice and actions.

A third way of dealing with the situation appears in two of the questions, and will be discussed in the context of those questions.

On this picture, a slight majority of the children at the North School thought of the teacher in this instance as punishing in what we have called the "impersonal" way, with the usual school controls. Fifty-seven per cent of the replies were in this category, and 29 per cent expressing such physical methods of punishment as hitting, slapping, spanking, etc. (see Table 21).

TABLE 21  
GIRL AGAINST TEACHER

	C N=25+3	A N=26+0	B N=20+3	BB N=22+0	North N=93+6	South N=25+0
School Controls	.54	.61	.56	.59	.57	.68
Scolding	.07	.11	.17	.18	.13	.16
Physical, or Violent Quality	.39	.27	.26	.23	.29	.16

What are these "school controls" that are so important to the children? The list of them is a long one, but they may be grouped into a few areas. A number are simply methods of isolation, in the school room. The teacher makes the child go off in a corner, or sit by himself, or else she makes him stay in when the others have gone. Another method is isolation outside of the room—in the hall or elsewhere—though the "in the hall" method is seldom mentioned by the public school children, since it is against the regulations in this school for a teacher to use this form of isolation.

In the third area, the teacher has recourse to some other authority, either the principal or home. She sends children to the principal or sends them home, tells their mothers, asks their mothers and fathers to spank them, etc.

Then there are several kinds of punishments hard to classify. For instance, the teacher may give the children bad marks, or deprive them of something, or make them do something to atone for the misdeed, or threaten them with "next time," and other miscellaneous ways.

Isolation in the room is the method most often mentioned by the North School children among these school controls, (with approximately half of the replies in this category), a slight majority in the "put in the corner" category—though inspection of the results by classrooms shows distinct differences, reflecting the individual teacher's methods (Tables 21 and 22).

TABLE 22  
GIRL AGAINST TEACHER: BREAKDOWN OF SCHOOL CONTROLS

	<i>G</i> N=16	<i>A</i> N=16	<i>B</i> N=19	<i>BB</i> N=13	North N=64	South N=17
ISOLATION IN ROOM						
Put in Corner	.19	.75	.16	.08	.30	.06
Make Stay In	.31	0	.26	.38	.23	0
ISOLATION OUTSIDE						
Put Outside	0	0	0	0	0	.76
Other Places	0	0	0	0	0	.06
RECOURSE TO OTHER AUTHORITY						
Principal	.19	.06	.21	.15	.16	0
Home	.12	0	.16	.31	.14	.12
Principal & Home	0	.06	0	0	.01	0
MISCELLANEOUS						
Bad Marks and Demotion	.12	.12	.10	.08	.11	0
Others	.06	0	.10	0	.05	0

For instance, the teacher in the *A* group, to judge by the children's answers, apparently uses Put in the Corner exclusively, whereas the *B* and *BB* group teacher favors making the children stay in. The investigators noted that this actually was the case in classroom practice.

Somewhat less important was recourse to other authority, constituting about one-third of the school control replies. These authorities were equally divided between the principal and home.

Other school controls were of minor importance.

The important thing to remember about the punishment of this little girl is that the majority of the children expect a relatively mild use of the usual school controls, but half as many think the child will be slapped, spanked, hit. This is perhaps surprising in view of the fact that such corporal punishment was not used in any of the classrooms concerned in this study. And though it is conceivable that one of these teachers, like teachers almost anywhere, might at some time "strike" a child, yet it is really inconceivable that any actual beating or spanking could go on. Yet listen to the way these replies are phrased: "Whip her," "Beat her," "Whack her with the ruler," "Spank her." The implications of this had better be laid aside for the time being, until we have the total picture.

How do the feelings of the South School children differ, in this situation? Very little. The majority of the replies (68 per cent) are in favor of "school controls"; the expectation of scolding (16 per cent) is just about what it is at the North School, and there are even some replies indicating an expectation of spanking and whipping (16 per cent.) Though this is a smaller percentage than at the North School, it is not significantly so.

However, the content of the school controls has an entirely different emphasis. Here there is no putting in the corner or making the children stay in, and likewise no sending to the principal. The stock answer, given by almost all whose replies are in this school controls area, is "Send her out in the hall."

Are the children any less "violent" in their concepts of corporal punishment? Look at the answer: "Maybe hit her with a ruler," "Spank her." It should be said, however, that two of the children who said "spank" giggled rather foolishly afterwards, and one of them added that "teachers don't usually spank." Yet even this knowledge was not enough to keep them from giving "spank" as a first spontaneous answer!

It appears that on this question we are finding some reflection of actual practices in both schools, and at the same time some kind of projection of feelings. The school controls as described by the children are entirely realistic. The *physical* punishment answers are not.

Though differences between the two schools are not striking, the replies of the South School children are *in the direction* of fewer physically violent answers.

## 2. Boy Against Teacher

*Explanation:* "Here's a little boy feeling very angry. See how mad he is? He's hitting the teacher, isn't he? What do you think she'll do to him?"

As indicated in Table 23, the over-all distribution of replies at the North School is practically what it was on the Girl Against Teacher, except that

TABLE 23  
BOY AGAINST TEACHER

	<i>C</i> <i>N</i> =25+4	<i>A</i> <i>N</i> =26+4	<i>B</i> <i>N</i> =20+6	<i>BB</i> <i>N</i> =23+1	North <i>N</i> =9+15	South <i>N</i> =25+0
School Controls	.55	.60	.50	.67	.58	.72
Scolding	.04	.07	.08	.08	.06	.04
Physical or Violent Quality	.41	.33	.42	.25	.36	.20
<i>X</i>	0	0	0	0	0	.04

there seem to be a few more answers containing the corporal punishment idea (36 per cent as against 29 per cent.)

However, examining the nature of the school controls (Table 24), we see that there is a slight shift in emphasis. Whereas it was enough chiefly

TABLE 24  
BOY AGAINST TEACHER: BREAKDOWN OF SCHOOL CONTROLS

	<i>C</i> N=17	<i>A</i> N=19	<i>B</i> N=17	<i>BB</i> N=19	North N=72	South N=19
ISOLATION IN ROOM						
Put in Corner, etc.	.12	.47	.06	.16	.21	.21
Make Stay In	.12	.05	.23	.26	.16	0
ISOLATION OUTSIDE						
Put Outside	0	.11	0	.16	.07	.58
Other Places	0	0	0	0	0	.11
RECOURSE TO						
OTHER AUTHORITY						
Principal	.52	.26	.12	.10	.25	.05
Home	.23	0	.29	.10	.15	.05
Principal and						
Home or Court	0	.05	.06	0	.03	0
MISCELLANEOUS						
Bad Marks and						
Demotion	0	.05	0	.05	.03	0
Others	0	0	.24	.16	.10	0

to isolate the little girl in the room, apparently for this boy something a little more drastic must be done. There is more recourse to other authority than in the case of the girl, and sending to the principal is the chief authority mentioned. One child even suggests that the principal will send the boy to court!

The expressions of violence are perhaps even slightly more dramatic than on the Girl Against Teacher, including "She'll pull him from the neck," "Give him a beating with a strap," "She'll pull him by the collar and push him in the corner," "Slam the door right on him." (It should be pointed out, however, that such dramatically violent replies are not found in the second grade or *BB* children, who restrict themselves to a milder spank, shake, hit. Moreover, the *BB* children give considerably fewer of these violent replies than any other group.)

When we turn to the South School replies, we see that the answers appears in proportions very similar to those of the Girl Against Teacher, though there is less scolding (mentioned in only one reply, as against four on Girl Against Teacher). Putting out of the room remains the most prominent school control, though a few more children on this question suggest isolation in the room in the form of "Sit him down in a chair," or

"Put him in the corner." Only one child brings in any reference to the principal, and only one mentions home.

The corporal punishment answers (not significantly fewer than at the North School but certainly in that direction) are phrased in a way that must seem to the children appropriate for this boy. Four of them are exactly the same statement, "Hit him back." The fifth adds "with a ruler." In the case of the Bad Girl there was only one "hit with a ruler," whereas the rest were in terms of "spank."

Thus children in both schools mete out a slightly different order of punishment for a boy who hits the teacher than for a girl who makes faces at her. As a whole, the North School children are more severe with him than with the girl—rougher, that is, and they feel that his behavior merits a good deal of recourse to principal and home—and even court! The South School children hit the boy, and spank the girl, and do a little more scolding in her case, but one can hardly say they are "rougher" with this boy. The method of discipline is essentially the same—he must be isolated, either in a chair by himself or outside in the hall. Principal and home do not begin to have the importance as aids to discipline that they have in the North School. In general, in the South School it appears that there are less stern sanctions against a boy hitting the teacher. The presence of fewer physically violent responses may be one of the indications of this.

As we suggested in summarizing the responses on the Girl Against Teacher question, it appears that here too, in neither school are the children giving entirely realistic responses. The presence of these physically violent replies does seem to indicate the projection of some fears, perhaps based on home experiences, or the home expounding of the traditional mores, probably more in the case of the North than the South School children. It may not be unreasonable to suggest, however, as we have before, that some teachers may be able to break through these projected fears to some extent. The BB teacher here as in other areas seems to be doing this.

It is likely, also, that maturity and experience help to overcome these unrealistic expectations. The physically violent replies of the C group (second grade), though they amount to a considerable percentage, are mild in character.

### 3. *Boy Against Boy*

*Explanation:* "Here's a little boy about to hit this little boy with a book, isn't he? What do you think the teacher will do to him if she turns around and sees him?"

A new category of responses appears on this question, where the aggressor

there seem to be a few more answers containing the corporal punishment idea (36 per cent as against 29 per cent.)

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ISOLATION IN ROOM						
Put in Corner, etc.	.12	.47	.06	.16	.21	.21
Make Stay In	.12	.05	.23	.26	.16	0
ISOLATION OUTSIDE						
Put Outside	0	.11	0	.16	.07	.58
Other Places	0	0	0	0	0	.11
RECOURSE TO						
OTHER AUTHORITY						
Principal	.52	.26	.12	.10	.25	.05
Home	.23	0	.29	.10	.15	.05
Principal and						
Home or Court	0	.05	.06	0	.03	0
MISCELLANEOUS						
Bad Marks and						
Demotion	0	.05	0	.05	.03	0
Others	0	0	.24	.16	.10	0

to isolate the little girl in the room, apparently for this boy something a little more drastic must be done. There is more recourse to other authority than in the case of the girl, and sending to the principal is the chief authority mentioned. One child even suggests that the principal will send the boy to court!

The expressions of violence are perhaps even slightly more dramatic than on the Girl Against Teacher, including "She'll pull him from the neck," "Give him a beating with a strap," "She'll pull him by the collar and push him in the corner," "Slam the door right on him." (It should be pointed out, however, that such dramatically violent replies are not found in the second grade or *BB* children, who restrict themselves to a milder spank, shake, hit. Moreover, the *BB* children give considerably fewer of these violent replies than any other group.)

When we turn to the South School replies, we see that the answers appears in proportions very similar to those of the Girl Against Teacher, though there is less scolding (mentioned in only one reply, as against four on Girl Against Teacher). Putting out of the room remains the most prominent school control, though a few more children on this question suggest isolation in the room in the form of "Sit him down in a chair," or



"Put him in the corner." Only one child brings in any reference to the principal, and only one mentions home.

The corporal punishment answers (not significantly fewer than at the North School but certainly in that direction) are phrased in a way that must seem to the children appropriate for this boy. Four of them are exactly the same statement, "Hit him back." The fifth adds "with a ruler." In the case of the Bad Girl there was only one "hit with a ruler," whereas the rest were in terms of "spank."

Thus children in both schools mete out a slightly different order of punishment for a boy who hits the teacher than for a girl who makes faces at her. As a whole, the North School children are more severe with him than with the girl—rougher, that is, and they feel that his behavior merits a good deal of recourse to principal and home—and even court! The South School children hit the boy, and spank the girl, and do a little more scolding in her case, but one can hardly say they are "rougher" with this boy. The method of discipline is essentially the same—he must be isolated, either in a chair by himself or outside in the hall. Principal and home do not begin to have the importance as aids to discipline that they have in the North School. In general, in the South School it appears that there are less stern sanctions against a boy hitting the teacher. The presence of fewer physically violent responses may be one of the indications of this.

As we suggested in summarizing the responses on the Girl Against Teacher question, it appears that here too, in neither school are the children giving entirely realistic responses. The presence of these physically violent replies does seem to indicate the projection of some fears, perhaps based on home experiences, or the home expounding of the traditional mores, probably more in the case of the North than the South School children. It may not be unreasonable to suggest, however, as we have before, that *some teachers* may be able to break through these projected fears to some extent. The *BB* teacher here as in other areas seems to be doing this.

It is likely, also, that maturity and experience help to overcome these unrealistic expectations. The physically violent replies of the *C* group (second grade), though they amount to a considerable percentage, are mild in character.

### 3. *Boy Against Boy*

*Explanation:* "Here's a little boy about to hit this little boy with a book, isn't he? What do you think the teacher will do to him if she turns around and sees him?"

A new category of responses appears on this question, where the aggressor

is child against child, and not child against teacher. We have called these responses attempts of the teacher to deal with the specific situation in a way that is appropriate to it alone. That is, she does not simply show personal anger, or use one of the stereotype control methods such as put the child in the corner, but instead she may "take his book away," or as one of the South School children says, "Well, I think the teacher will have to have a talk with him about hitting with books because this book is in the library."

All of the previous categories are present on this question also.

The North school children apportion their punishments for this boy approximately in the way they apportion them on the two previous punishment questions, expect that they have added this new specific situation method in 10 per cent of their replies. Fifty-one per cent of the replies are school controls, 8 per cent scolding, and 31 per cent some form of physical punishment (Table 25).

Is the *content* of these answers any different? Do the school controls have an emphasis appropriate to this situation? Inspection of Table 26 shows that

TABLE 25  
BOY AGAINST BOY

	C N=24+1	A N=26+6	B N=19+8	BB N=23+4	North N=92+19	South N=25+2
School Controls	.52	.56	.44	.52	.51	.67
Scolding	.04	.12	.04	.11	.08	.11
Physical or						
Violent Quality	.36	.25	.41	.22	.31	.15
Specific Situation	.08	.06	.11	.15	.10	.07

TABLE 26  
BOY AGAINST BOY: BREAKDOWN OF SCHOOL CONTROLS

	C N=17	A N=20	B N=15	BB N=15	North N=67	South N=19
ISOLATION IN ROOM						
Put in Corner	.12	.55	.07	.13	.24	.11
Separate	.06	0	0	.13	.04	.05
Make Stay In	.35	.05	.33	.33	.25	0
ISOLATION OUTSIDE						
Put Outside	.06	.10	0	.13	.07	.47
Other Places	0	0	.13	0	.03	.05
RECOURSE TO						
OTHER AUTHORITY						
Principal	.23	.05	.07	.07	.10	.05
Home	.12	.10	.27	.13	.15	.05
Principal & Home	0	.05	0	0	.01	0
MISCELLANEOUS						
Bad Marks and						
Demotion	0	.10	.13	0	.06	0
Others	.06	0	0	.07	.03	.21

the children do consider this offense less serious than the offense of the boy who struck the teacher. Whereas isolation was not enough for him, and he must be sent to the principal, for this little boy isolation—almost equally divided between the “corner” and “stay in” methods, with a few suggestions also of “separating” the two—is the most important control, constituting a little over half of the replies in this school controls category. The recourse to principal and home becomes much less important, comprising a fourth of the replies. All of the other methods within this school controls area are mentioned by only a scattering of the children.

The corporal punishment answers, however, remain violent in nature: “Beat him,” “She’ll get that book and hit him!” “Shake him up in the air,” “Hit him on the head with a book,” in addition to whip, smack, hit, slap. (Here again it should be pointed out that the *BB* and *second graders’* expressions are among the milder ones.)

Even some that we have considered “specific situation” replies have a violent aspect: “I think she’ll tell the boy to hit with the same book—hit him harder.”

The South School children make no radical departure in the percentages in which they apportion punishments to this boy, though they also introduce a few answers that seem to deal just with this specific situation (7 per cent). As on the last question, they resort to corporal punishment (15 per cent) less than the North School children, not more so in the sense of a statistically significant difference, yet again very close to it, and these answers are milder in quality, three of them simply “Hit him back,” and the other is “Get a spanking if the teacher sees him”—though this child giggles foolishly after this answer, as though knowing she has said something pretty silly.

The most common school control remains sending out in the hall, with just a smattering of putting in the corner, separating, sending to principal, and sending home.

For the first time, however, a few answers appear in those miscellaneous categories having to do with deprivation: “Make him lose something nice like not be able to go on a trip,” “Make him miss playground.” One reply has a very special flavor, “Stand him in the corner to think about it.” This last phrase, “to think about it” takes this reply out of the realm of simply putting in the corner.

Children in both schools, then, do think specifically in their replies on this question, bringing out emphases that seem to them appropriate for this little boy, but the weight of these emphases is by no means the same for both groups. Though the North School children are not so severe with this

boy as with the last one (not sending him to principal or court so much), and though they do let the teacher deal with the specific situation, still there is on the whole much expectation of violent handling in their replies (with some indication of less violence in the *BB* group as we found before). The South School children remain much less violent. Their replies seem to reflect more accurately the kind of punishment that would actually take place in their room—mild deprivations, and isolation, and simply talking with the child to make him stop. However, even here, as at the North School, the presence of even a few physically violent replies indicates some projected thinking or feeling.

#### 4. *Girl Against Girl*

*Explanation:* "Here's a little girl grabbing a book away from this little girl, isn't she? What do you think the teacher will do to her?"

On this question we encounter quite a shift in the responses of the North School children. For the first time the usual school controls lose their overwhelming significance, and constitute only 42 per cent of the attitudes expressed (Table 27). And the *specific ways* of dealing with this particular situation take on real importance (25 per cent.) The scolding and physically violent responses appear in about the same proportions that they have previously, however (7 per cent and 26 per cent), with a trend toward fewer violent responses in the *BB* group.

The school controls that are mentioned are predominantly those that represent some form of isolation in the room, with a rather mild "putting in the corner" (and others very similar) in the lead. Just as on the last question, the recourse to the principal and home have much less significance, constituting about a fourth of the school controls (Table 28).

The corporal punishment answers, too, though there are not significantly fewer than on the other questions, are somewhat milder than those meted out to the two boys—including beating, slapping, spanking, hitting, whipping, and smacking, putting in dark corners and closets—but there is only one

TABLE 27  
GIRL AGAINST GIRL.

	<i>C</i> <i>N</i> =25+5	<i>A</i> <i>N</i> =26+3	<i>B</i> <i>N</i> =19+4	<i>BB</i> <i>N</i> =23+3	North <i>N</i> =93+15	South <i>N</i> =25+2
School Controls	.30	.38	.43	.58	.42	.55
Scolding	.03	.10	.09	.08	.07	.04
Physical or						
Violent Quality	.30	.28	.30	.15	.26	0
Specific Situation	.37	.24	.17	.19	.25	.41

TABLE 28  
GIRL AGAINST GIRL: BREAKDOWN OF SCHOOL CONTROLS

	C N=11	A N=12	B N=10	BB N=13	North N=46	South N=16
ISOLATION IN ROOM						
Put in Corner	.09	.42	.30	.38	.30	.19
Separate	.09	0	.10	0	.04	.06
Make Stay In	.27	.08	.20	.31	.22	0
ISOLATION OUTSIDE						
Put Outside	0	0	0	.15	.04	.38
Other Places	.09	0	0	0	.02	0
RECOURSE TO						
OTHER AUTHORITY						
Principal	.18	.33	.10	.08	.17	.06
Home	.18	0	.20	0	.09	.06
MISCELLANEOUS						
Bad Marks and						
Demotion	0	.17	0	0	.04	0
Deprive	.09	0	.10	.08	.07	.12
Others	0	0	0	0	0	.12

that has the vigorous and violent quality we have encountered before: "She'll take her by the neck and just throw her on the floor."

In dealing with this specific situation, the teacher is seen as trying to settle the difficulty in a number of ways—taking away both the girls' books, giving the book back, taking the book belonging to the girl who is grabbing, etc.

We find the same general trend at the South School. These replies in which the teacher deals specifically with this situation are much more important than they have been before. In their general nature they are similar to those at the North School, though there are a number of mild verbal ones that are not common at the North School, such as, "I think she'll say you shouldn't treat books like that."

Here at the South School, however, the physically violent replies are, for the first time, completely absent.

The school controls are slightly less important on this question, mentioned in 55 per cent of the replies. As might be supposed, the "putting outside" method is still in the lead. Deprivations and other mild punishments appear on this question as they did on the last one: "Make her lose some fun all alone." "Make her do something that she doesn't want to do." "Let her think about it."

Children in both schools, then, are considerably milder toward this little girl than to any of the others.

What can we say as a whole about these concepts of punishment?

Children in both schools seem to be reflecting two kinds of expectations

in their answers—one kind is based on their actual experience with discipline in their own classrooms, and the other kind has no basis in school practices. That is, as we have pointed out before, neither the North nor the South School teachers beat, spank, or whip their children.

The North School children reflect in their answers a considerably greater expectation of this physically violent, angry handling. What accounts for this? Does it reflect actual *home* practices? Does it reflect the traditional attitude toward public school experience in New York City? Are these North School children still so new to school experience that they have not yet learned just what to expect at school? The milder quality of the second grade replies leads us to believe this point may be relevant. And do the teachers, for all their good intentions, fail to impress the children with their essential good will? The fact that in the midst of a group of children expecting severe punishment we find a segment who do so to a much smaller degree, leads us to believe this *is* partly a matter of teacher influence.

To what extent do such expectations of physical punishment represent children's fears? Are they an indication of anxieties the children are carrying about with them? Is there a relation between the pressure to be "good" and the expectation of severe punishment? If this is the case, our South School children are much freer of this burden than the majority of the North School children are. Though their feelings are not completely free of pressures, to be sure, yet their relative lack of anxiety in this area does seem to present good evidence that these children are being introduced into a freer development, as a result of the total constellation of their living, in school and out.

## F. AREA: ANGER

### 1. *The Angry Children*

*Explanation:* "Here are some children who are feeling very angry, aren't they? See how mad they look? What do you think the teacher did to make them feel that way?"

The responses on this question were the most difficult of all to analyze. Though many of the children clearly indicated that the anger was because of punishment, and others that it was because of having to do things they don't like to do, there were a great number whose shading of meaning was difficult to grasp. That is, some deprivation was expressed, but it was difficult to tell whether the children were feeling aggrieved at the teacher for treating them unjustly, or whether they simply meant to imply that they themselves were in the wrong and being deprived for that reason, with

attendant anger. Such a response is "She took their library books away." What does this mean? Is she a horrid teacher who should not take children's library books away, or have they been naughty children mistreating the books and thus must suffer for it? Anger could well attend either circumstance, as some of the replies do indicate. It is possible that many children simply do not, in their own minds, go ahead to analyze why they are being deprived. Possibly deprivation, whatever its cause, gives rise to anger and that is the most important emotion connected with it.

However it may be, we would suggest that further questioning of the children would be advisable on this particular picture.

The categories that we finally established include: (a) responses which seem to indicate that the children are being punished, in the usual ways that they are accustomed to in their respective schools (see the "Punishment" series of pictures.) Such replies include "She punished them," "Beat 'em," "She made them stay after school," "She put them in the corner," "The teacher yelled at them," "Didn't let them go out when the other children went out." (b) Answers in this category were very clear. The child states not only the punishment but the reason for it: "They were drawing in books and she took the books away." (c) In this category are the deprivations of one sort or another, whose shades of meaning were difficult for us to analyze. These deprivations are of two kinds: The teacher took something away from them (usually books, as clearly suggested by the picture); or she didn't let them do something they wanted to do. (d) In this category the responses seemed to indicate conflicts not involving punishment. The children have to do something they don't like to do. "They don't want to read their lesson." "Make them do their work." "Going on a trip that they didn't like to go on." It is quite possible that some of the responses that we have classified as deprivations could be grouped likewise in this category, because after all, when a child is deprived of doing something he wants, it usually means that he has to do something he doesn't want. Actually we are sometimes basing our classifications here on the way a child has phrased his answer. (e) In these responses the children seem to be suffering over what might be called a loss of status. "Said that they'd been very bad children and they thought they'd been very good." "Say they didn't work good, and weren't steady," "Didn't give them good reports."

There were some special replies hard to classify. The children at the North School most commonly agreed on some kind of punishment as the reason for the anger. Thirty-nine per cent of the replies embodied one or more of the usual school punishments (Table 29). Ten of these replies

TABLE 29  
THE ANGRY CHILDREN

	<i>C</i> <i>N</i> =25+1	<i>A</i> <i>N</i> =26+0	<i>B</i> <i>N</i> =18+2	<i>BB</i> <i>N</i> =23+1	North <i>N</i> =92+4	South <i>N</i> =25+0
Punishments	.23	.57	.40	.37	.39	.20
Punishment for a Reason	.27	.08	.20	.17	.18	.12
Deprivations	.35	.08	.10	.29	.21	.28
Conflicts	.15	.04	.05	.12	.09	.16
Loss of Status	0	.08	.10	0	.04	.12
<i>X</i>	0	.15	.15	.04	.08	.12

indicated that the teacher made the children stay in; nine mentioned some physical kind of punishing such as slapping, beating, spanking; eight remained on the verbal level of teacher anger in punishment, with scolding and screaming, etc.; seven simply mentioned "punish," and five responses included mention of some such bodily restraint as having to sit down, or sit in a corner, or fold hands. One child each suggested that the children had been taken to the principal, and had had a letter sent to their mothers. It may be significant to point out here that the second graders in this group express punishment in terms of direct teacher anger such as slapping, beating, scolding, much *less* than the first graders. In fact, only one second grader included such an answer. And among the *BB* group, though there is more in terms of scolding, only one mentions a physically violent punishment. This is in accord with the findings on the four punishment questions, in which expressions of physical violence are milder in these two groups.

Punishments for a stated reason were less commonly mentioned, such replies totalling only 18 per cent. The children sometimes suggest as the "reason" merely that there has been "bad" behavior, but more often specific misdeeds are given, such as "sassing" the teacher, being bad down in the yard, drawing in books, not doing their work, being noisy, screaming in the work period. (The *second grade* children, however, do mention punishments with reasons just as much as punishments alone.)

Just about as important as these punishments for stated reasons were the deprivations, mentioned in 21 per cent of the replies. These deprivations were almost equally divided between the two kinds of ideas, that the teacher had taken their books (or something similar) and that she wouldn't let them do something they wanted to do, such as "the teacher didn't let 'em play." "They couldn't read, they couldn't play, they couldn't talk, they wanted to go to the bathroom, they couldn't draw."

(The reader can see at once how difficult it is to get at the innuendos of meaning in such replies.)



Much less important are the responses that we have called *conflicts*, those that do not seem to have the punishment aura hanging over them, but suggest rather that the children don't like to do the things that they are supposed to do in school. "They don't want to read that story," "Cause they got to do their lessons." This idea appears in only 9 per cent of the replies.

Replies in the other category, suggesting loss of status, are negligible. There were a number of replies which we found difficult to classify anywhere. Three seem to indicate distress that the teacher is going away; one child interpreted the scene as meaning that one of the children in the picture had been given books, but not the other two; another definitely blames the teacher, leaving no doubt that she has a grievance against her: "She didn't treat them nice."

The children at the South School think less in terms of clear-cut punishment, though the difference is not significant on the 5 per cent level of confidence. Only 20 per cent of the replies suggest punishment, and almost needless to say the punishments described differ radically from those in the North School. There are no extremely violent instances of teacher beating, screaming, etc. Three responses suggest that the children could not go out at play time. Another is merely "Punished them," and the fifth, "Make them leave their work and sit there and watch the other children."

Likewise there are somewhat fewer punishments with the reason given (12 per cent,) though this is not statistically less than at the North School. These "punishments" too, are very mild, one of them simply taking the form of "made them lose their fun," and in the other two the teacher takes something away from the children. The "misdeeds" or reasons for punishment are very vague as phrased, merely taking the form of "They might have done something naughty," "They musta been bad," "If they'd behave better."


The "deprivations" total slightly more than at the North School (28 per cent as against 21 per cent), but this is not a significant difference. They have the same general content, indicating either that the teacher took something away, or wouldn't let them do something. "She didn't let them do their arithmetic." (Wishful thinking, again, in this mention of arithmetic?)

The conflict and loss of status answers are larger categories than at the North School, though not significantly so, and likewise there are a few more of the hard-to-classify responses. In general, the content of all such replies is very similar to what we find in the North School—with the

exception that loss of status is once expressed as "Say they weren't steady," an expression we never find in the North School.

Also, note should be taken of the keenness with which one of the South School children has taken a cue from details in the picture—"I think she made them read. Looks like they're tired of reading. Their eyes look closing."

The outstanding difference between the two groups seems to be that the South School children are not so oriented toward the expectation of punishment, and the content of punishment itself is a good deal milder. This is in line with results on the four "punishment" questions. In fact, in every way, the results of this test seem to corroborate what we have found before. The expectation of punishment looms large in the feeling of our North School children.



#### IV. SUMMARY FOR NORTH SCHOOL

What is the constellation of responses, when we pull them together for the North School, omitting for the time being the *BB* group?

In trouble, the majority of the North School children expect the teacher to be helpful, but have a concept of a rather unemotional person, who will handle the situation without a great deal of personal warmth. They are not free from the suspicion that when they are in trouble it is their own fault in some way.

Their concepts of happiness in school show that what they want is the *giving* teacher, the one who gives surprises, parties, presents. They are oriented not only toward these spontaneous child-like pleasures, but also to the pleasures of playing, and making and doing things themselves—that is, building with blocks, painting, hammering, coloring. Yet even though their choices reveal this “idea of pleasure” so uppermost in their minds, still there is another idea of some importance—namely, that happiness comes as a result of good behavior. In fact, this idea is present to just about the extent that the idea of self-blame is present, as an ingredient in “trouble.”

What does being “good” mean to these children? How do they define goodness? A little girl, praised by her teacher, they believe has been good chiefly for minding the teacher, keeping quiet and sitting still; also to some extent for doing her lessons. The concept of the praise card revolves even more around ideas of compliant, obedient behavior.

The children find it easier to put their finger on more specific acts when defining what is “bad,” at least in connection with a little girl deprived of a gold star, and a little boy sitting off in a corner for a misdemeanor. The bad acts are not the converse of the good acts, by any means. Of course, the order of the pictures may have suggested to them that the girl was bad for “making faces.” However, in the case of the little boy there is no doubt that he is bad chiefly for hitting and fighting. Mere disobedience or general non-compliance becomes dwarfed in the concept of “badness” for this boy.

The expectation of punishment is riddled through and through with the concept of angry, violent handling in the form of slapping, beating, spanking, and even much more dramatic throwing about and lifting by collars and slamming against the door. This, we have said, must represent some projection of feeling—either based on home experience, or anxieties about school. It is not realistic response to the real situation.

This phenomenon of projection can be traced like a thread throughout these various concept areas, prominent in some, more or less submerged in others.

In the trouble area, for instance, where we begin with these responses, we have suggested that the majority of the children may not be reflecting all of the warmth and sympathy they could very well expect, on the basis of the *actual* school situation. It seems likely that they may have brought to school with them false expectations and fears and an orientation toward self-blame which all teachers have not been able to break through.

In the area of happiness, on the other hand, there is not much evidence of projected feeling or experience. The children seem to be responding realistically, reflecting the *actual* pleasures of the schoolroom, as well as the feeling that happiness flows from goodness. In the definition of *goodness*, however, we do find among these children certain concepts that we hesitate to believe are entirely accurate reflections of the actual scene. That is, even the BB teacher has not been able to entirely break through the belief that the Praise Card is given for compliant "goodness," in terms of what we have called "blind obedience." We would never deny that the North School teachers do place some value on the behavior of a child who is quiet and sits still and does what they say. Yet the overwhelming predominance of the concept of compliance may very well be partly a result of reinforcement by home pressures which loom large in the growing consciences of these children—home pressures, and resulting anxieties.

In the area of bad behavior, particularly that of a "bad boy" sitting in a corner, it appears that the children are well schooled in the realities around them. Their answers are entirely realistic, in terms of the misdemeanors which must have been brought to their attention countless times—hitting, fighting, making noise, running around, throwing blocks, taking things from other children.

But when we turn to the punishments for these crimes, we find ourselves in the area where the responses are the most unrealistic. The children are able to reflect quite accurately the specific modes of control used by their particular teachers, yet these realities seem merely to overlay a core of violence which represents either home experience, or fearful imaginings, or both. The children reflect this expectation of violence in their "angry" answers also, revealing that punishment, in violent terms, is easily read into a situation where "anger" is involved. There is some indication that the maturity and experience of the second graders has helped them overcome some of their most violent expectations.

The thread of unrealistic response becomes particularly prominent, then, where concepts of goodness and of punishment are involved. Immediately one posits a possible connection between the pressure to obey, and the fear

or expectation of violent handling when one does not obey. Peak matched by peak.

Perhaps one can think of this goodness-punishment area as the one where children may have the greatest *blocks toward the absorption of reality*. This means that the presence of fears, anxieties about behavior, pressures, and tendencies toward self-blame may so cloud perception that children cannot easily believe in a teacher's mildness and gentleness, in her readiness to take the child's side and handle his misdeeds in some other way than a violently punishing one; in her willingness to comfort in a completely non-blaming way when children are in trouble; in her desire for an active, socially oriented kind of "good behavior" that goes beyond passive sitting and listening and obeying.

Other realities of the classroom may be absorbed with less difficulty, i.e., the realities clustering around the pleasures of the schoolroom, as well as around specific misdeeds on the part of the children.

An understanding that children may not absorb all realities with the same readiness should be of considerable help to a teacher who is setting up guideposts for herself as she struggles to implant her values. It should often reassure her, too, to realize that children are not always reacting to her *personally*, but are coming to school with their images of her preformed.



## V. SUMMARY FOR SOUTH SCHOOL

In trouble, these children expect a good deal of sympathy and help and direct warmth from their teacher. However, they are not entirely free from a suspicion that they themselves are to blame, as in the *Lost Bracelet* situation.

Happiness and free choice ideas center around spontaneous child-like pleasures of food and parties, playing and working with the play materials which are part and parcel of their daily program. Yet the "idea of goodness" as an ingredient of happiness is important. And the concept of pleasure as a release from the restrictions and restraints imposed by school is even more prominent than the idea of goodness. This may be an indication of the prominent place held by problems of control in the consciousness of these children; or it may mean that they are courageously expressing a wish for more free choice than they have; or again that they are answering the question as they think public school children might answer it.

How do these children define "goodness"? The little girl praised by her teacher is seen as "good" chiefly for old-fashioned "behaving," modified by a few children as "being steady"; however, doing good school work (in terms of reading, writing, and arithmetic) and helping the teacher in some way in the schoolroom are also of considerable importance.

Even the Praise Card picture, which presents a situation foreign to these children, brings out these ideas of good *social* relations, with other children and with teacher—though the preponderance of replies are concerned with compliant behavior.

Almost never do these children think of goodness in school as a matter of keeping quiet and sitting still.

What about the bad behavior of a little girl who does not get a gold star? Almost universally these children reply "she was bad," when asked why the girl did not get a star. They are quite able to break this down, however, and define the badness. Failing to do what the teacher says, as well as various troublesome and disobedient acts such as not resting well, are of major importance in the thinking. However, the concept of failure to do good school work has some importance, and a number of children take a cue from the previous picture and transfer the "making a face" misdemeanor to this Bad Girl.

The Bad Boy, sitting in a corner, has been bad for fighting and *disturbing* (by bothering, grabbing, etc.). Also to some extent he has been bad for failure in relation to school work—such as not wanting to read and write.

Particularly in comparing this Bad Boy with the good Praise Card boy, it

is clear that the concepts of goodness and badness, at least in the situations pictured, are by no means the reverse of each other.

In the realm of punishments, these South School children reflect for the most part the mild method actually in use in their group—isolation outside of the room, in the hall. In a small percentage of the responses—never more than 20 per cent, and usually less—punishments of a physically violent nature such as spank or whip do appear, but these are never dramatically rough, and a few children giggle self-consciously after mentioning “spank,” and a few even go on to say that they know teachers do not really spank.

Though “punishment” enters into the thinking of the children in the angry situation, it is never the physically violent kind, but the deprivation variety. Deprivation, indeed, is the major concept here.

Unrealistic responses—that is, those that seem to spring from the imaginations and projections of the children rather than from the actual atmosphere of the classroom, do not follow the course we traced at the North School.

In the trouble area, we find the realistic expectation of warmth and comfort and interest.

The Happy responses, however, do contain two elements that lead us to suspect that these children were not identifying the pictured situation as their own, but were replying as they thought public school children might reply. The bursting away from restraint answers and the references to reading and writing, might be interpreted partly in this light.

Though responses in the good behavior area do reflect many of the actual values of the schoolroom—the importance of coöperation, responsibility, and good social relations—yet here too there are unrealities. Goodness in terms of old fashioned behaving is more important than in the teacher's terms of “steadiness,” and it appears also in the completely unrealistic terms of doing one's reading, writing, and arithmetic.

In the bad behavior area, likewise, some of the children carry this unrealism to the extent of what we have called the “dunce hat” idea—penalty for doing poor academic work, spelling the wrong way, etc.

In the punishment realm, just as at the North School, but to a much smaller extent, the children project on to the teacher *some* physically violent punishment, which must represent either home experience, or anxiety.

Thus at the South School there *are* unrealities, particularly in the areas of good behavior and punishment, just as at the North School, though in much smaller degree. The pressure to be good, and the fear of punishment are greatly relaxed in comparison with the North School, but even so there is a small peak, matched by small peak.



## VI. COMPARISON OF SCHOOLS

In brief summary, what are the outstanding differences between the children at the North and the South School?

In trouble, we find the South School children expecting more warmth from their teachers; in happiness we find in both groups the same kinds of spontaneous child-like pleasures, and the strong urge to play and paint and hammer and build, though with more expression of desire for freedom from restraint and for "doing what they want" in the South School; in both schools we find in fairly similar proportions the idea that happiness follows from goodness.

The definition of "goodness" in the South School, however, contains much more of an ingredient of *social* responsibility and good relationships than we find at the North School, and likewise there is some interpretation of compliance in the teacher's terms of "steadiness."

In the bad behavior area, too, the *social relations* concept looms up more importantly than at the North School.

And in punishments, we find the South School children much freer of the fear, or the expectation of angry, violent handling.

Thus the world of the South School children seems to be one where adults are looked to for comfort and sympathy and mild handling more so than in the North School world; where goodness is a goal but there is not an anxious fear of badness; where "goodness" is construed a great deal more constructively than in the blindly compliant terms of obeying, sitting quietly, folding hands.

The fact that the responses of the *BB* children at the North School fall into a very similar constellation has led us to believe that a teacher can do a great deal to drive a wedge into the expectations and feelings that her first grade children bring to school with them. It appears that regardless of home background, she can through her atmosphere implant some constructive and positive concepts of goodness and badness, root out some of the fears, and establish an image of herself as a kindly and sympathetic human being. We do not consider this proved by the evidence of just this one group, but offer it as a likely hypothesis.

If we turn now to examine the profiles of some of the individual children, we can more clearly see how and in what ways teachers and atmospheres have driven their particular kinds of wedges into the preconceived concepts of the children.



## VII. INDIVIDUAL PROFILES

This examination of the responses of a few individual children may throw further light on the differences between North and South School, on the dynamics of this test, and on the practical uses to which teachers may put the test.

Though we have not stressed throughout this study the differences *within classrooms* at the North School, if we now take a few individuals from each classroom the reader can perhaps more clearly see the interplay of child, teacher, and atmosphere whose constellation it is our ultimate aim to describe and analyze, in the large study of which this paper is a part.

### A. GROUP A

#### 1. Jack—Age 6:8

##### TROUBLE

The Sick Boy (What is the teacher saying to him?) "Go down to the nurse."

The Lost Bracelet (What is the teacher saying to her?) "Look for it."

##### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "Carry them on a picnic."

Free Choice (What will they choose to do?) "They'll go and play. They'll play in a store like this store."

##### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "She did what the teacher told her to do."

The Praise Card (What did he do to get the Praise Card?) "He was good." (What did he do that was good?) "He do what the teacher told him to do."

##### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "'Cause she was bad." (What did she do that was bad?) "'Cause she made a . . . She didn't do what the teacher told her to do."

Boy in the Corner (What did he do that was bad?) "He was bad. Threw blocks."

##### PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "Stand her in the corner."

Boy Against Teacher (What will the teacher do to him?) "She'll stand him—send him to (name of Principal.)"

Boy Against Boy (What will the teacher do to him?) (Jack breaks in with a comment even before the explanation of the picture is finished: "Yeh, 'cause he's mad.") "Stand *him* in a corner."

Girl Against Girl (What will the teacher do to her?) "Stand *her* in the corner."

## ANGER

The Angry Children (What did the teacher do to make them feel that way?) "They didn't get promoted."

Here we have what appears to be in many ways a realistic reflection of this room. No deep anxieties are reflected here. In fact, school seems to be a relatively simple place where you do what the teacher tells you, and refrain from throwing blocks, and the teacher will handle you mildly, showing neither strong sympathy nor lack of sympathy. There will be some pleasures like picnics, and the chance to play in the store in the corner of the room.

Many of the children in this group seem to reflect this same "grey" color. That is, neither fears nor joys rise to high peaks; good behavior is a matter of simple compliant obedience; punishments are fairly mild and realistic. There is some question in our minds whether this atmosphere is really bringing to the surface the personality problems of these children.

## B. GROUP B

In the *B* group we seem to find a reflection of a different atmosphere. We feel more tension in the children, and concern over behavior, on the whole, with many violent and unrealistic punishments. Of course, we are dealing with a different group of children.

Here is a child who seems much concerned with not antagonizing adults, yet she is not one of the most extreme cases by any means:

1. *Sylvia—Age 6:10*

## TROUBLE

The Sick Boy (What is the teacher saying to him?) "She said go down to the nurse."

The Lost Bracelet (What is the teacher saying to her?) "That's too bad. Can't you buy another one?"

## HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "She made them good." (Is that what makes them happy?) "Yes."

Free Choice (What will they choose to do?) "Maybe they might go out to the bathroom or jump rope, or go on the slide and big swings."

## GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "The teacher gave her an apple." (The picture is explained again.) "She was always good."

The Praise Card (What did he do to get the Praise Card?) "For being good." (What did he do that was good?) "Maybe he was good and folded his hands and was in good order."

## BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "She was a naughty girl." (What did she do?) Maybe she did something to the child or maybe she hit the child. I'd be good to get that gold star."

Boy in the Corner (What did he do that was bad?) "He was naughty, or maybe he hit the other children or hit another child in the stomach, so she's talkin' to him. Don't you never do that!"

## PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "Ooh! The teacher will punish her!" (What will she do?) "Sit her in the corner or go under the piano."

Boy Against Teacher (What will the teacher do to him?) "She'll punish him and maybe she'll take him to the principal and maybe he'll go to court because he's a big size boy." (Then follows a long tale about someone she knows who had to go to children's court. Then she begins to tell about her cousin, how awful he is in school, all he thinks about is airplanes and Superman, though Mother says you better study.)

Boy Against Boy (What will the teacher do to him?) "Punish him. Well, can't the boy fight back?" (How will the teacher punish him?) "Might put him in the corner or underneath the table or put him to the piano or put him in the closet."

Girl Against Girl (What will the teacher do to her?) "Punish her." (How?) "Put her in the closet or put her in the corner or go in the closet."

## ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Punished them."

Sylvia seems to be an expert on punishment. It appears that she has had considerable contact with transgressing children and has taken it very personally. She is worried about being bad. Her philosophy might be stated thus: "If you can achieve goodness, you will be happy." Free choice, to her, means getting away from the tightness and constraint of the punishing world of school. This child, obviously, is projecting her own troubled world onto the schoolroom. The real teacher is not breaking through to a very marked degree here, though she is seen as a fairly sympathetic person in trouble, and has succeeded in getting across at least *one* social concept in the realm of bad behavior—the concept that badness has to do with hitting other children or "doing something" to them.

It is interesting to turn to another child in this same group, who has a completely different home background. His family has recently come from Puerto Rico, and when he entered the group in the beginning of the year, he could speak only Spanish. It seems quite likely that the preconceived

notions of "school" instilled into this child in Puerto Rico must have been somewhat different from the picture picked up by Sylvia in Harlem. At any rate, George appears to be reflecting only the *actual* atmosphere, the actual teacher, undistorted either by preconceived notions or personal fears.

## 2. *George—Age 7:4*

### TROUBLE

The Sick Boy (What is the teacher saying to him?) "Go to the nurse."

The Lost Bracelet (What is the teacher saying to her?) "Go get it!"

### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "The teacher laughing and they like the teacher."

Free Choice (What will they choose to do?) "Play." (With what?) "Play clay, blocks."

### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "She knows to write."

The Praise Card (What did he do to get the Praise Card?) "He'll give it to his mother." (Question repeated.) "Played nicely."

### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "She's bad in school." (What did she do?) "She do a naughty face."

Boy in the Corner (What did he do that was bad?) "He was hittin' the children."

### PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "She said, don't do that!"

Boy Against Teacher (What will the teacher do to him?) "Scold him."

Boy Against Boy (What will the teacher do to him?) "Scold him."

Girl Against Girl (What will the teacher do to her?) "Take it from her and give it to her, and scold her."

### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Scold them."

Through this minimum English emerges clearly the picture of a sympathetic, *personally* pleasant teacher who has succeeded in getting across very positive and constructive ideas concerning good and bad behavior. Goodness has to do with school accomplishment and good social behavior. Bad behavior, too, is a *social* matter. We do not find blindly compliant answers in this child. Punishments for him are entirely realistic and mild—merely a matter of scolding, and clearly reflected are spontaneous pleasures of playing and working with the constructive materials that are offered.

## C. GROUP C (SECOND GRADE)

The flavor of this atmosphere is a distinct one. We do not seem to find reflected in these children many deep anxieties. Rather, these second graders give a kind of stereotyped picture of school behavior—on the whole mild, but uninteresting. Very little sense of active enjoyment of school comes through, though again and again it is clearly indicated that these children would *like* to be playing. The “rumpled” atmosphere of this particular classroom is frequently reflected—the running and jumping about, the difficult disciplinary relations between teacher and children.

Because of the stereotyped nature of many of these replies, we suspect that children of this age may be old enough to have become a little wary of expressing freely to an adult what they feel about adults.

In Howard, below, is an example of this stereotype picture, on the lowest barren level, with only two glimmers showing through—one, a punishment rather well thought out, and the other an indication of pleasure in drawing pictures.

1. *Howard—Age 7:10*

## TROUBLE

The Sick Boy (What is the teacher saying to him?) “I have to go to the nurse.”

The Lost Bracelet (What is the teacher saying to her?) “Look for it.”

## HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) “She made them nice.”

Free Choice (What will they choose to do?) (He volunteered, before the explanation was finished:) “They’ve been good.” (After the end of the explanation:) “Draw pictures.”

## GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) “Behaved.”

The Praise Card (What did he do to get the Praise Card?) “Behaved all week.”

## BAD BEHAVIOR

The Gold Star (Why didn’t she get a gold star?) “‘Cause she was bad. Made faces at the teacher.”

Boy in the Corner (What did he do that was bad?) “Fight with the teacher.”

## PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) “Spank her.”

Boy Against Teacher (What will the teacher do to him?) “Hit him.”

Boy Against Boy (What will the teacher do to him?) “Hit him.”

Girl Against Girl (What will the teacher do to her?) "Give her book back."

#### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Make them do their work."

We see that his chief concern is behavior, and his ideas of goodness are not too differentiated. Punishments are largely the stereotyped "hit" or "spank." The teacher radiates no warmth. She gives only practical advice. In fact, she scarcely seems to exist as a person.

A child like this may not be used to being encouraged to think his ideas are important!

Let us look now at another of these second graders—Nancy—where the concern with behavior is uppermost. The teacher is a punishing one, yet non-violent, and the wish to play shows through, though in the answers there is no orientation to ideas of constructive work.

### 2. Nancy—Age 8:0

#### TROUBLE

The Sick Boy (What is the teacher saying to him?) "She'll give him a slip and go down to the nurse."

The Lost Bracelet (What is the teacher saying to her?) "Tell the children and look around for her bracelet."

#### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "Let them talk and play." (Play what?) "Games." (What kind of games?) "Did You Ever See A Lassie."

Free Choice (What will they choose to do?) "Play happy together."

#### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "She obeyed her teacher."

The Praise Card (What did he do to get the Praise Card?) "He wasn't bad."

#### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "'Cause she was a bad girl." (What did she do?) "The teacher had to spank her." (Why?) "'Cause she was talking."

Boy in the Corner (What did he do that was bad?) "He didn't play right." (What did he do?) "He grabbed other people's blocks and things."

#### PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "Spank her."

Boy Against Teacher (What will the teacher do to him?) "Smack him."



Boy Against Boy (What will the teacher do to him?) "Spank him—punish him."

Girl Against Girl (What will the teacher do to her?) "Spank her and punish her and teach her not to grab other people's books."

#### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Punish them, 'cause they didn't do what the teacher said to them."

### D. SOUTH SCHOOL

When we turn to the individual profiles at the South School, we do not by any means find a group of children who reflect no pressures, compulsions, problems. As we have already pointed out, the South School children have a concern with "goodness" as the North School children do, though usually they define it in a different manner. And they, too, project certain unrealities into the scene. Some of them bring certain pressures from home.

Nevertheless, one feels very strongly here the presence of a teacher, or an atmosphere, breaking through with very positive, constructive values.

And the children themselves seem to emerge as individualities to a greater extent than most of the North School children do. We sense a greater variety of personalities, problems, and perceptions among them. Is this partly the result of an atmosphere, in their total living, which encourages them to be their spontaneous selves?

Karen exemplifies very well some of the fundamental differences between the North and the South School.

#### 1. Karen—Age 7:1

##### TROUBLE

The Sick Boy (What is the teacher saying to him?) "Well, you want to go home?"

The Lost Bracelet (What is the teacher saying to her?) "Well, why didn't she ask somebody to see if they can find it or ask if they have it."

##### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "Might have told them they'll have ice cream for lunch."

Free Choice (What will they choose to do?) "I guess they'll be good."

##### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "She musta came to school on time."

The Praise Card (What did he do to get the Praise Card?) "Well, he might have drawn these pictures good." (Points to pictures on wall.)

## BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "Maybe she was naughty." (What did she do?) "She might have spilled paint all over the floor or something."

Boy in the Corner (What did he do that was bad?) "I guess he hit the teacher or hit somebody for no reason."

## PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "Put her out in hall."

Boy Against Teacher (What will the teacher do to him?) "She might put him out in the hall, because that's what my teacher does if I hit her."

Boy Against Boy (What will the teacher do to him?) "Well, I think the teacher will have to have a talk with him about hitting with books because this book is in the library."

Girl Against Girl (What will the teacher do to her?) "Well, I think she'll say you shouldn't treat books like that."

## ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Maybe she said they weren't going out to play or weren't going on a trip or something."

Now clearly Karen has a desire to be good, but in quite constructive terms. One sees her values centering not only around school regulations and protection of materials (what a good little housekeeper, caretaker, and timekeeper she is!) but also around creative work and play and trips. Furthermore, we see clearly that she likes good food, and knows she shouldn't hit.

No anxiety surrounds these concepts. She is clear about what should and should not happen, but she is not terrified. The teacher shines through as a gentle and reasonable and sympathetic person.

Karen is a "happy" be-good child, not a "frightened" be-good child. Her goal is to be good, but she is not afraid of being bad. Herein, perhaps, lies one of the fundamental differences between the North and the South School children.

Let us look at another South School child, Carl, who exemplifies in one person many of the points we have been making about the South School throughout this study.

## 2. Carl—Age 6:11

## TROUBLE

The Sick Boy (What is the teacher saying to him?) (Before the end of this question and explanation, Carl started right out with his own

interpretation which was that the boy had been bad. His answer to the question was:) "She's saying, I think I should send you home."

The Lost Bracelet (What is the teacher saying to her?) (Before answering, he adds to the story of the bracelet, suggesting that what she lost might have been a ring.) "Ask some of the rest of the class to help you look for it."

#### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) (Before the end of the explanation he breaks in and interprets it as the children playing a certain clapping game he knows about. Even at the end of the explanation and question he ignores the "teacher" angle and sticks to his clapping game idea, pointing out that one child is clapping while the others aren't just as in the game.) "Maybe that game—'cause I like that game myself."

Free Choice (What will they choose to do?) (He breaks in before the explanation with his own interpretation: "I know, they have been good, they're the best children." At the end of the explanation he says:) "Well, she shouldn't have said they could do *anything*." (We stop and converse about this point a little bit. Then he goes on:) "What I think they might do—they look happy—I think he wants to fight 'cause he's starting to make a fist and he's happy." (What does the little girl want to do?) "Well, she looks like she wants to fight too, 'cause look—" (and he points to her hand which surely does look as though it might be doubling up into a fist.)

#### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "Did good work." (What kind?) "Maybe good writing."

The Praise Card (What did he do to get the Praise Card?) "I think he drew a good picture or wrote a book to the class."

#### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "'Cause she was naughty. Yeah, 'cause she's the one who was naughty." (Referring to the girl who made a face.)

Boy in the Corner (What did he do that was bad?) "Mighta hammered a nail in crooked, and then hammered someone else's nail crooked."

#### PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) (Before answering, he simply added a comment, "Yeah, 'cause she doesn't like her.") "I think send her out in the hall."

Boy Against Teacher (What will the teacher do to him?) "Might sit him down in a chair in a corner."

Boy Against Boy (What will the teacher do to him?) (He ignores the explanation and question and has an interpretation of the scene all of his own, explaining that "He hit *her* and she's going over to the window, and now he's hitting him!" Decides it is the same bad boy

that we saw before. Looks back at the picture and decides he is right. At this point another attempt is made to get at the punishment answer:) "Might put him in the corner." (Note: In this picture there is a girl in the background, and this is the "her" Carl is referring to.)

Girl Against Girl (What will the teacher do to her?) "Take the book away from her and put her at a separate table with no book at all."

#### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "I think they made them read. Looks like they're tired of reading. Their eyes look closing."

This boy, with his mature orientation, almost seems typical of a child in the middle years rather than the early elementary years. He seems to have achieved an independence of adults—apparent, even, in the way he ignores the examiner in the test and uses his own interpretations of the pictures.

His maturity is apparent, again, in the way he integrates his thinking throughout the pictures and makes an interconnected whole.

Clearly he is a vigorous child in his mental activity—but spontaneously so, not in a pressured way. He is vigorous in other ways too. A *buoyant* kind of aggression is apparent—he is eager to fight for fun—but this is not anxious aggression. It is the dominance of a strong personality.

In fact, this boy seems to have no anxiety about badness or goodness. His values are in terms of good positive accomplishment, and the background underlying them is one of security.

Let us turn to one other South School child, who, though he also is a keenly perceptive child, reveals a pressure which is not a common one at the North School but weighs down on a number of these South School children—a pressure on the *intellectual* level. Anxiety in this area is quite a different matter from the *behavior* anxiety we find commonly among the North School children.

### 3. Ted—Age 6:10

#### TROUBLE

The Sick Boy (What is the teacher saying to him?) "I don't know" . . . (said in a slow, thoughtful way) . . . "She might say for her to call his mother and take him home." (Then tells that he was sick once in school and had to go home.)

The Lost Bracelet (What is the teacher saying to her?) "To ask the children if they found it."

#### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "I don't know—I know! She didn't give them anything to

do. Maybe they're bad and they're glad they're bad 'cause they don't have to do anything." (And here he notices that as the children are seated, the arrangement is boy, girl, boy, girl. He perceives the arrangement as in the shape of a cross, which it is.)

Free Choice (What will they choose to do?) "Go outside and play. That's what I always like. I don't like to work."

#### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "I don't know." (The question is repeated and he is urged along.) "She rested well." (Then he tells that he once rested well.)

The Praise Card (What did he do to get the Praise Card?) "I don't know. . . He did his homework and he wasn't bad." (Then he asks who the teacher is in the picture, meaning is it a representation of a real teacher. He is told that it is not a real person, and then he goes on to suggest that pictures could be taken of a real schoolroom. He explains that his father takes movies.)

#### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "'Cause she wasn't good." (What did she do?) "I don't know. . . Maybe she didn't do her homework, so the teacher put her outside."

Boy in the Corner (What did he do that was bad?) "I don't know. . . Maybe he broke somebody else's woodwork, 'cause I see the wood-working."

#### PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "She'll put her outside . . . 'cause I . . . Why does she do this? 'Cause she has hard work to do." (He seems to want to explain the whole situation. The above is not exactly verbatim. He goes on to comment that he could paint these pictures. He says that he is a good painter and drawer.)

Boy Against Teacher (What will the teacher do to him?) (He keeps asking "Why?" during the explanation of the picture.) "She'll do the same thing as the other one." (He means the girl who is making a face.)

Boy Against Boy (What will the teacher do to him?) (Asks "Why?" first.) "Put him outside, 'cause he wasn't reading his book and she'll put him outside." (Then he asks if there are any *real* answers to these questions?)

Girl Against Girl (What will the teacher do to her?) (Wants to know first why the girl is doing this.) "Put her outside, 'cause she was reading and she wasn't."

#### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Did she take away the books, 'cause I don't see any books for these two children" (pointing to the ones who have no books in front of them).

Ted *appears* to be suffering under a burden of "homework," which may

be a reflection of too high standards held up for him at home. (The only "homework" actually given by this teacher was an occasional assignment to investigate something at home, ask parents for information, etc. The term "homework" was used.) His responses indicate that school is felt as a restraint, and that he has anxieties about living up to expectations in the realm of intellectual endeavor. To be sure, he sees the teacher as sympathetic, and his concepts of punishment are realistic and mild. His relations with people on an *emotional* level are relaxed. The pressures are on the *intellectual* level.

His many "I don't knows" contribute to this impression. He seems to be a child who fears that he will not know all there is to know. He reveals this, also, in his questioning about whether or not there are any *real* answers on this test.

Such an anxiety probably springs from the background of this child, not from the atmosphere of the schoolroom. It represents one of the anxieties that may easily take root in a family milieu where the parents are professional people with high intellectual goals for themselves and their offspring, and usually their *one* offspring at that.

### E. GROUP BB

We have purposely left the BB Group till the end. Following closely upon these South School profiles, the resemblances between the two groups may be apparent.

Let us begin with Bobby, who is almost like a mirror held up to his teacher. Here are reflected the values she was striving for. We can see wherein they are similar to the South School values, and wherein they differ.

#### 1. Bobby—Age 6:11

##### TRouble

The Sick Boy (What is the teacher saying to him?) (Interprets it first in his own way which is that somebody hit the boy.) "I don't know." (He is urged along.) "What's the matter?"

The Lost Bracelet (What is the teacher saying to her?) "She'll give her another one."

##### HAppInESS

The Happy Children (What did the teacher do to make them feel so happy?) "Gonna have a party."

Free Choice (What will they choose to do?) "Paint pictures."

##### GOOD BEHAvIOR

The Good Girl (What did the little girl do that was good?) "She didn't answer anybody." (This probably means that when children

talked to her when they shouldn't, she didn't answer them.)

The Praise Card (What did he do to get the Praise Card?) "Painted a nice picture."

#### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "'Cause she was bad." (What did she do?) "She talked when the teacher told her not to."

Boy in the Corner (What did he do that was bad?) "He didn't play right with the others."

#### PUNISHMENTS

Girl Against Teacher (What will the teacher do to her?) "Make her stay in." (He goes on to say that sometimes his teacher makes them do that.)

Boy Against Teacher (What will the teacher do to him?) "Send him up to the principal." (Tells that the children in his room talk back but don't hit the teacher.)

Boy Against Boy (What will the teacher do to him?) "She'll make him go out and can't come in any more."

Girl Against Girl (What will the teacher do to her?) (Tells first why she is grabbing). "Same thing as the one hitting with the book."

#### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "'Cause they got to do their lessons."

It is clear that Bobby is giving an almost entirely realistic picture of the atmosphere of his room. He seems to be trying hard to match the situations to his room and his teacher. Clearly he has integrated many of his teacher's values centering around playing nicely, and doing constructive creative work such as painting good pictures. She herself is mirrored as a sympathetic, interested person who helps in trouble, gives parties, punishes mildly. In all these ways the picture is almost identical with the South School picture. We do find here one slight difference, however. There is concern with "talking" that seldom appears at the South School. However, Richard understands well that talking per se is not the sin. It is only wrong when you talk at the wrong time—when the teacher has told you not to. Even here he is integrating his teacher's values.

Josephine, below, is another child who is coming right along. One can sense the teacher and the atmosphere breaking through here and establishing themselves. Only the punishment concepts lag behind.

### 2. Josephine—Age 6:11

#### TROUBLE

The Sick Boy (What is the teacher saying to him?) "I'll write a note and send you to the nurse."

The Lost Bracelet (What is the teacher saying to her?) "How did you lost it?"

#### HAPPINESS

The Happy Children (What did the teacher do to make them feel so happy?) "Told them a story in a book."

Free Choice (What will they choose to do?) "Paint."

#### GOOD BEHAVIOR

The Good Girl (What did the little girl do that was good?) "She reads."

The Praise Card (What did he do to get the Praise Card?) "Done everything the teacher told him to."

#### BAD BEHAVIOR

The Gold Star (Why didn't she get a gold star?) "Because she was a bad little girl." (What did she do?) "She didn't do her work."

Boy in the Corner (What did he do that was bad?) "'Cause he hit the little girl and boy."

#### PUNISHMENTS

Girls Against Teacher (What will the teacher do to her?) "Hit her."

Boy Against Teacher (What will the teacher do to him?) "Punish him."

Boy Against Boy (What will the teacher do to him?) "Take the book away from him and hit him."

Girl Against Girl (What will the teacher do to her?) "Make her put her face to the wall."

#### ANGER

The Angry Children (What did the teacher do to make them feel that way?) "Wouldn't read a story to 'em."

It is apparent that Josephine is beginning to place "goodness" values on constructive school work such as reading. She shows pleasure in painting and stories. However, she has quite a bit of teacher hitting in her concepts. She has not yet learned to modify severity and adapt punishments to reality. This area may be the very last one a teacher can break through. We find this the case with a number of these *BB* children.

We should also mention, at the other end of the scale, that two of the *BB* children have succeeded in integrating the teacher's values to such an extent that they even use her word, "coöperate," in defining goodness.

In connection with this presentation of a few individual profiles, it should be pointed out that here, in this kind of study and analysis of the constellation of responses from individual children, is one of the most important uses of this test. We advise grouping the responses just as we have done, and studying them in search of pressures, anxieties, freedoms. We are convinced that many of the children involved in this study revealed themselves to us,



in this test, much more importantly than to their teachers. This was clear when we sat down with the teachers and went over some of these profiles with them. We recall a case of a child who was fairly new in her group. The teacher had formed almost *no* idea of her, yet she happened to be a very voluble child who opened up and revealed in this test an extremely interesting personality which the teacher would have given a great deal to have been aware of.

And we are thinking of other children, who on this test, showed themselves at the top of the scale as far as integration of positive values is concerned—yet the teacher had not recognized it because these were the quiet, and in some ways slower and less articulate children.

And there were others whose underlying anxieties at least one of the teachers was unaware of, probably because the eager response of these children to the work and play materials had impressed and pleased her, and put her off the track.



## VIII. NOTES ON THE MULTIPLE REPLIES AND ON SEX DIFFERENCES

### A. A NOTE ON THE MULTIPLE REPLIES

Though the responses which embodied more than one attitude on a question were of relatively minor incidence, we considered it worth while to examine them to see if they fell into any particular pattern. At the North School, it was only in the areas of good behavior and punishment that more than 10 per cent of the children gave such replies. In these areas we find a range of from 14 per cent on the good behavior questions to a high of 20 per cent on the Boy Against Boy in the punishment series. The meaning of this is difficult to tease out. These are the two areas where the children seem to feel the most compulsion and anxiety, and where their responses reflect more than the actual behavior and attitudes of the teacher.

Are the children less clear-cut in their thinking about issues that trouble them the most?

At the South School, on the whole, there is less of this multiple thinking than at the North School. On four questions there is none of this kind of thinking at all—which is never the case at the North School. On only one question does the percentage rise above .09, and that is the Praise Card picture where 12 per cent of the children answer with these replies combining more than one attitude.

It may be that the more relaxed feelings the South School children have—that is, the absence of strong pressures toward compliance and fears of violent punishment—result in somewhat less of a need to “lay it on thick” from all possible angles, in responses to these picture situations.

### B. A NOTE ON SEX DIFFERENCES

Significant differences between boys' and girls' responses on this test are conspicuous for their absence rather than their presence. We can point to only a few trends that come to light at the North School. (Because of the small numbers at the South School, we have not tried to study possible differences between the North and the South School, or differences within classes at the North and at the South School.)

There is some indication that it may be the boys who prefer use of materials such as paints, clay, wood, etc., when choosing what they want to do and telling what makes them happy. These differences are not statistically significant, but may indicate a trend.

Another such trend which appears rather consistently is the tendency for

girls rather than boys to define good or bad behavior in terms of the general, over-all kind of compliance which we have called blind obedience—"minding the teacher," "doing what the teacher tells you," being "good." Again, there are not statistically significant differences to back this up, but the general direction appears in three of the four good and bad behavior questions—The Good Girl, the Praise Card, and the Gold Star.

On the Boy in the Corner, a difference comes to light that is statistically significant. The boys much more than the girls claim that the offense of the bad boy is *bad relations* such as bothering, mussing up another child's work, etc. The girls, on the other hand, are the ones who appear to claim that the boy has been *fighting* (though this difference is *not* significant.) Do the boys reject a reputation for hitting and fighting?

Finally, there is some suggestion that it is the girls rather than the boys who tend to give the multiple answers that embody more than one attitude. This is by no means the case on every question, but appears particularly on the Good Girl, the Boy Against Boy, and the Boy Against Teacher (with a statistically significant difference here). On no questions do the boys give significantly more of these dual attitude responses than girls do.

Summing up what differences we have found in the North School, we can say that there appears to be some evidence that more boys than girls will choose to work with materials such as paints, clay, wood; that more girls than boys tend to conceive of good and bad behavior in terms of general over-all being good and minding, or not being good, not minding.

It is the girls, too, who appear to divide their thinking a little more, giving more the multiple answers that contain more than one attitude.

And lastly, the girls seem to claim that boys hit and fight, whereas boys explain their misdemeanors more in terms of bad social relations such as bothering.

We refrain from any further comment until such time as there may be further material available by which to test these findings. The little we have here cannot be more than suggestive.

## IX. GENERAL SUMMARY

A projective picture technique was devised to explore the feelings of children about their relationships to their teachers, and their life in school. Thirteen picture situations, with explanations, and questions were used to elicit from children expression of their feelings in the areas of trouble, happiness, good and bad behavior, punishments, and anger.

This test represents one segment of a larger study of classroom atmospheres and their effect on the children exposed to them.

The test was given to a total of 94 first and second grade children in four classrooms in a New York City public school, the "North School," and, for purposes of comparison, 25 first grade children in a private experimental school, the "South School."

The majority of the North School children revealed strong pressures to obey in a compliant, blindly obedient fashion. Their concepts of punishment were rather heavily weighted with the expectation of violent handling; however, they took spontaneous pleasure in parties and surprises and had a strong drive to play and work with materials, and in general saw their teachers as sympathetic and helpful, though unemotional.

Their responses reflected a good deal of the teachers' actual methods, values, and programs, though notably in the two areas of goodness and punishment there were unrealistic responses that seemed to represent projection of home experience or underlying anxiety or both.

In general the South School children had a great deal more freedom from pressures and fears in the areas of good and bad behavior, and punishments, than the North School children had. Their concept of the teacher was a warmer one, and they placed more emphasis on constructive *social* aspects of behavior in the classroom. In these ways they were reflecting the actual atmosphere of their classroom. However they too gave some unrealistic responses, revealing that they had slightly more respect for "blind obedience" and more expectation of spanking than their teachers would have expected them to have. Likewise they made many references to reading, writing, and arithmetic—all of which were non-existent in their program, and may indicate that they were not responding to the pictured situations as their own.

The fact that the children of one teacher in the North School, a teacher whose values were fairly close to South School values, gave responses that were in many ways similar to those of the South School children, led us to believe that it is entirely possible for a teacher to mold attitudes and values through the classroom atmosphere she creates. This is not proved by

the findings in this one group, but is offered as a hypothesis for further study. Additional weight is given to the hypothesis by examination of individual profiles, by classrooms. The particular atmosphere created by each teacher does seem to find some reflection in the individual children's replies.

Use of this test as a tool to study the anxieties and pressures in individual children is seen as a fruitful possibility. In the cases of some of the children tested, a great deal was revealed that the teachers had not been aware of.

Sex differences in responses were studied for the North School only, and very few differences or trends came to light. There was some indication that it was the boys who preferred working with materials; girls who tended to think of good and bad behavior in terms of general over-all compliance or non-compliance; the girls who did slightly more of the divided type of thinking, and the girls who claimed that boys hit and fought (whereas boys defined their behavior more as "bothering").

Throughout this report we have raised certain general questions as they occurred to us in connection with the specific findings. Though it is not possible in a single study to do more than define differences in responses of two groups of children, we were interested to reflect on possible explanations for the differences we found, some of which were more surprising than others. Now we are reluctant to close this report without drawing together, in somewhat more general terms, the tentative explanations which were made in the body of the study. To us there seem to be implications here for the problems currently being faced by teachers and educators on several points, the basic problem being, of course how to apply newer, deeper insights about the psychology of behavior to the process of education.

The problem of how to develop a socialized individual who yields to the rules of the group but not out of fear, whose group participation can be thoroughly enjoyed without asking too much personal, individual denial, is a predominant one. Modern educators have claimed that the children who are educated in the atmosphere of the new school become adept at genuinely social living at relatively early stages of development. Judging not by how children act but by the values they seem to have absorbed into their system of things (a much sterner test), these findings seem to substantiate this claim. The replies of the South School children indicate much more active growth in the area of social relations, getting along well with other children, helping the teacher; and, in general, sustaining positive social relations appeared as values both with respect to good behavior and bad behavior for boys as well as girls.

This, however, is the beginning rather than the end of this important question. In educational circles, early integration and absorption of social values has become an accepted objective, clearly articulated in recent publications of the New York City Board of Education, for example. Experimentation over a considerable period, both in the classroom and the laboratory, bears out the feasibility of holding this objective. What needs to be studied further is the process by which young children absorb the values related to the socialization process. Until this process is carefully studied and understood, we are in danger of making errors that will be no less harmful because they are by-products of worthy goals.

One of the results that was surprising to us was that the children of the South School, living in a consciously freer atmosphere, expressed feelings of being restrained and a degree of seeking to be released from restraints in various ways. Several explanations were previously posited but the most significant, in connection with the present point, is the clue this may give us to what the children are involved in, subjectively. The philosophical tenets of being reasonable rather than arbitrary with children, giving them ample opportunity to make choices, use judgment, suffer the "natural consequences," create an atmosphere which the children take an active part in structuring, collectively, and lead to early and deep exposure to basic human relationships. These children show greater absorption of social values because they are struggling actively with and enjoying, as well, deeply felt social experience. Subjectively, this is a broadened stage for learning from one's errors, suffering conflicts in the process of living them out, developing a personal code within the group code. All this is in contrast to the formal school where the code was "taught" to the children rather than assimilated by experience and where actual spontaneous social contact was at a minimum. The problem calling for study is analysis of the process of early socialization: What is the psychological load? Is the conscious staking down of freedom by the children part of the basic process or is it a by-product of the self-consciousness of the adults who have broken this path? How can this ferment in the area of social relations which is only a reflection of the general social ferment concerning problems of freedom and authority, be adapted to varying needs and rates in social growth of individual children? These comments are not intended to disparage socialization as an important democratic goal. They are intended rather to point to directions for further study of the complex process of absorption and integration of social values, specifically, study in those situations where the initial experimental stages have already been worked through.

It is interesting to study the difference in the structure of the value systems, as reflected in these responses, of these two groups of children. The relationships of what is dominant, what is differentiated, what is emotionally salient, are more important than any one specific finding. Thus, we see that the South School children show not only greater absorption of social values but also markedly fewer values that would lead them to expect compliant, obedient behavior of themselves. Their concepts of goodness and badness have much less to do with passively and quietly pleasing and minding the teacher or blindly obeying her than do the concepts of the North School children. Not that they do not take pleasure, as has been noted previously, in being good, in being approved and accepted by their teachers. The fact is they are moving beyond the range of satisfaction through submission. Their heightened social values are evidence of one of the ways, alternate to compliance and obedience, through which they can find pleasure in acceptance by the adult. The difference lies in what is conceived as the essential ingredient of goodness rather than any false independence of the need to be accepted as essentially good.

In the South School children's responses we noted that their concepts of what constitutes good and bad behavior were not only different in content but were also both more specific and more highly differentiated than those of the other group. These concepts were embedded in the ordinary workings and the exigencies of the daily school situation. They were not merely gross counterparts of the nod or the frown of the teacher. The authority of the teacher had already been partly diffused into the needs of the situation, and virtue in the eyes of the teacher lay more in making things go right for the group rather than smoothly for the teacher. The implication here seems basic to the whole large question of education for democratic living. The teacher's rôle leans toward that of an instrumental rather than an arbitrary authority.

Closely tied in with children's concepts of what constitutes bad behavior are expectations of what will happen if one is "bad," of how one's bad behavior will be censored, disapproved of, or punished. In the North School, the teacher was much more likely than in the South School to mete out some form of arbitrary punishment rather than to deal with the bad behavior in terms of its specific aspects, and punishments conceived by the children were very often violently destructive in nature. The violence expressed was phantasied far beyond the reality of school experience and probably was also in excess of the children's home experiences, in the main. Putting this finding beside other findings such as the concern over com-



pliance and the relatively undifferentiated authority vested in the teacher, another relationship suggests itself which is worthy of further study on other groups of children, in other situations. Children's concepts and phantasies of punishment are a function of the strictness of the code (related to compliance and the authority-figure) under which they are expected to behave. In the South School, where children's codes are structured to a greater extent, around the specific needs of a social situation and where the teacher, the figure of authority, is partly an instrument for the situation rather than an authority, *per se*, infringement of the code has less devastating psychological overtones. Broader study of this relationship would be exceedingly valuable as a way of substantiating the claims for positive mental hygiene values implicit in the atmosphere of the modern school. The indications from these findings are that the children of the South School were absorbing a less stringent system of values, conceiving basic relationships (of which the teacher-child relation is certainly one) with a lesser degree of servile compliance and fewer fears of devastating disapproval or punishment.

Insomuch one could say that they were more relaxed, psychologically, even though one keeps in mind some of the ferment and psychological turmoil referred to earlier in this summary in connection with the problem of early absorption of social values. The falseness of the common concept of the "modern" child as an indulged child, with no need to please anyone but himself was evidenced in the degree to which the children of the South School as well as those of the North School associated goodness with happiness. With a different system of values to absorb and a different kind of authority to internalize, their conscience development becomes a complicated and slow process. This is the personal counterpart of the complexity and something less than top efficiency which characterizes the democratic process, generally.

Perhaps if this could be understood by those critics of modern education who regard it as a scheme for free-for-all indulgence of childish impulses, there would be less resistance to the problems of educational transition with which we are working. Two of the specific problems of transition should also be noted in connection with the findings of this study.

Throughout it has been pointed out that the values of the children in either school reflect partly school atmosphere and partly home atmosphere. Often, teachers working with children where home mores do not coincide with the philosophy and practices of the modern school feel deep futility concerning the value of what they do. For them, the findings of the group

which we have called *BB*, seems to us to have special importance and should be further studied and checked. If the atmosphere of the school can have as much effect on the development of values and attitudes as seems to be the case in this instance, then the psychological atmosphere of the school as a whole can be seen to be a major factor in counteracting the harsher aspects of reality which many children meet in their out-of-school lives.

The question of re-training teachers is a prominent one. We are impressed from the experience of our work, with the difficulty in changing psychological atmosphere in a school for several different reasons. Perhaps too much thought has been given to what teachers should be and what they should give children without sufficient thought and analysis of what the children within the larger context of their life atmospheres can really absorb. We are hopeful that the technique such as the one we are working with may illuminate this problem of what the child can learn or become in the sphere of values and attitudes rather than merely what the teacher can give to him. In the intellectual sphere, this point of difference between what is taught and what is learned has been more clearly recognized. The question of the application of mental hygiene to school-room atmosphere begins basically with what the teacher feels about the children and what her own ideals for human relationships are. How much these can be passed on to the children will depend on the total school atmosphere, on the children's preconceptions of school as a constellation within which the children have to absorb the values and attitudes of a particular teacher and on a broader plane it will also depend upon the general life atmosphere of the children which is an important, decisive factor in determining how readily and how selectively they absorb teacher values.

## APPENDIX

The pictures were presented in the following order:

1. The Good Girl.
2. The Sick Boy.
3. Girl Against Teacher.
4. The Happy Children.
5. The Gold Star.
6. Boy Against Teacher.
7. (Picture that was discarded.)
8. The Praise Card.
9. Boy Against Boy.
10. The Lost Bracelet.
11. The Angry Children.
12. Girl Against Girl.
13. Boy in the Corner.
14. Free Choice.

In using these pictures again, we would change the order so that the Girl Against Teacher does not precede The Gold Star so closely. It seemed fairly clear to us that many of our Gold Star answers were conditioned by this Girl Against Teacher picture.

We would prefer a different set of pictures for use in such schools as the South School, where the physical set-up and mores are so different from those we were trying to reflect in the present set of pictures.

Results of the study indicate that a different pairing of pictures might well be experimented with, particularly in the sympathy area.



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## A STUDY OF THE RELATIVE EFFECTS OF AGE AND OF TEST DIFFICULTY UPON FACTOR PATTERNS\*

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## I. THE SETTING OF THE PROBLEM

### A. THE HYPOTHESES

Psychologists over the past 20 years have studied the relationship between the age of subjects and the factor patterns obtained from their scores on batteries of intelligence tests. Professor Henry E. Garrett, in his address to the American Psychological Association as its retiring president for the year 1946, presented evidence to support a differentiation hypothesis with respect to the growth of intelligence. Professor Garrett's hypothesis was: "Abstract or symbol intelligence changes in its organization as age increases from a fairly unified and general ability to a loosely organized group of abilities or factors" (12, p. 373). From his hypothesis Professor Garrett drew important theoretical as well as practical implications. Briefly, he pointed out that it "seems to effect a rapprochement between the Spearman General Factor and the Group Factor theories," and further that "Thorndike's 'quantity hypothesis' is not opposed to the differentiation hypothesis. . . ." (12, p. 376).

Concerning its implications for practice he said:

"The differentiation hypothesis has definite practical implication for the interpretation of intelligence test scores over a wide age range. . . . I do not think that at the elementary school level we should attempt, except very tentatively, to fractionate the *IQ* into say, language ability, number ability, reasoning and the like" (12, p. 376). . . . At the high school and college levels intelligence breaks down . . . into a number of relatively independent factors. It would seem to be theoretically more defensible, therefore, and practically more useful, to measure verbal, numerical, perceptual, and spatial ability, and perhaps other factors at these ages, than to give the subject a single over-all score" (12, p. 377).

To this investigator it seemed that the implications of this hypothesis were of such importance for both theory and practice that an independent test of it was justified.

In addition, an examination of the testing techniques employed in the studies upon which the differentiation hypothesis was based led the investigator to formulate a second hypothesis to be tested at the same time. This second hypothesis was: The observed differences between the factor patterns for two age groups are due not only to the age differences of the groups in question but also to the differences in the difficulty levels of the test materials for the two populations.

## B. PREVIOUS WORK ON THE DIFFERENTIATION HYPOTHESIS

A survey of that part of the literature which concerns the change of mental pattern with age might well begin with Slocombe (31) who was one of the first to consider this problem. Slocombe studied the variations in "*g*" as measured by tests administered to subjects at intervals of time varying from one day to three months. Although we today would look upon this method as being entirely inadequate, Slocombe concluded ". . . that '*g*' really is constant, and that any apparent variations found by testing are attributed to varying group factors involved in the tests used, and that the appearance of such variation is to be regarded as a serious defect in the tests" (31, p. 110).

As long as changes in group factors were considered defects in tests, little in the way of constructive work on the problem of their relationship with the general factor could be expected. It was not long, however, before psychologists became interested in the importance of group factors as indicators of special abilities over and above the general ability designated as "*g*."

T. L. Kelley (19) was one of the first to study their importance as measures of intelligence. He administered a battery of 10 tests to a population of 140 seventh grade subjects and also to 110 third grade subjects of both sexes. Because only 60 of the third graders turned in usable papers on the tenth test, Kelley made two separate analyses of his data. From these he concluded, ". . . the factors found are independent of the tutelage occurring between grade three and grade seven. . . . It thus seems that factors reported are established early in life. In fact it seems reasonable to attribute them, at least in major portion, to original nature" (19, pp. 133-134). When he extended his study to a kindergarten population he again concluded that all of the factors he found in the younger subjects, except one, were of the same nature as those revealed in the older populations (19, p. 149).

Soon after the work of Kelley others became interested in the organization of general and group factors. Schneck (30), in working with college men, found a correlation of only .2625 between verbal and non-verbal abilities, and even lower correlations between these and memory. He concluded that at the age level of his subjects (18 to 21 years) the verbal and number tests were not measures of the same general ability, and thereby indicated that there was a rather complete independence of mental factors in adults.

In contrast to these findings, Bryan (5) reported that at the age of five years intercorrelations between memory tests, vocabulary tests, and the

Stanford Binet yielded a single central factor. The fact that the Stanford Binet and the vocabulary tests showed a slightly higher correlation with this factor than did the memory tests is not so important here as is the fact that these three types of tests all measured much the same thing in young children.

Schiller (29) tested boys and girls aged nine years and found definite evidence of verbal, number, and spatial abilities with ". . . the possibility of a single common function throughout all such tests" (29, p. 58).

Three years later Asch (1) retested 79 of the boys and 82 of the girls of Schiller's original group. He found that a drop in the mean intercorrelations of the tests had taken place, and that this drop was somewhat larger for boys than for girls. He also analyzed the intercorrelations using the multiple factor method, and the results of this analysis fully confirmed both of the previously mentioned facts. These findings are extremely important because Asch's study is one of the few that is based upon a retest of the same population. It should be pointed out here that his results, showing that the decrease between the ages of 9 and 12 years in the intercorrelations and in the first factor loadings was greater for boys than for girls, are not in conformity with those which have been found by the other investigators mentioned later in this study.

A study by Garrett, Bryan, and Perl (13) was designed to gain information concerning the mental organization of children aged 9, 12, and 15 years. The battery which they used consisted of six memory and four non-memory tests. They found that the mean intercorrelations of all tests for both boys and girls decreased between the ages of 12 and 15 as did the mean intercorrelations of each of their sub-groups of tests for these age levels. Their data, however, show that although this decrease likewise occurred between the ages of 9 and 12 for girls, it did not occur for boys, there being an increase in the mean intercorrelations of all the tests for the latter. This increase also appeared in the mean intercorrelations of all tests by sub-groups except those in which the memory tests predominated.

The multiple factor analysis employed in this study corroborated these findings, showing a consistent decrease with increasing age in the per cent of the variance attributable to the first factor for girls and for boys between the ages of 12 and 15 years. The per cent of variance attributable to the first factor increased in the case of boys aged 9 to 12 years. When only the memory tests were factored this increase disappeared (13, pp. 18-27). Therefore we may presume that had only the non-memory tests been factored a much greater rise would have occurred in the per cent of

variance attributable to the first factor for boys between the ages of 9 and 12 years.

These data were also analyzed by Richards (27) using the centroid method. His solution showed a consistent shift toward discreteness with increase in age for girls. The same general shift was likewise observed for boys but the picture was somewhat confused at age 15 because of the low total variance, and because a third factor was necessary for adequate interpretation at this point.

In addition Richards analyzed Chrysostom's mental test data for children in Grades IV, V, and VI. Here he found a tendency for the clusters to become more discrete in passing from Grade IV to Grade VI. However, in passing from Grade IV to Grade V the factors became less discrete. It was necessary to use three factors at the fifth grade level instead of the two which had sufficed in both the upper and lower grades.

A similar re-analysis of previous studies employing the centroid method was reported by Garrett (11) under whose direction much of the work just cited had been done. In analyzing the data of Schiller, Schneck, Bryan, and two studies by Anastasi, his most important findings were; (a) a decrease in the correlation between the verbal and number factors from .825 for Schiller's nine-year-olds to .225 for Schneck's college men and .242 for Anastasi's college woman; (b) a correlation of .000 between the memory and number factors and .085 between the memory and verbal factors of Anastasi's college women. His analysis of Bryan's study of young children failed to show any clear-cut structure. It will be recalled that her original data indicated a very close relationship among all of the tests given to her five year old population.

In close agreement with other studies of the mental pattern of adults was the work of Thurstone (35). He administered 56 tests to 240 subjects whose modal age was 18 years. From these tests he obtained 12 orthogonal factors, nine of which he named. These latter have come to be known as the Primary Mental Abilities.

Thurstone's Theory of Independent Mental Abilities was subjected to a test in an experiment conducted by Morrow (23). He gave eight tests consisting of 23 variables to 80 college men and found that, ". . . the correlations are mainly positive . . . although rather low, thereby indicating slight degrees of interrelationships among the abilities tested" (23, p. 84). When he submitted his data to analysis by the centroid method, four factors emerged. The correlation between Factor I and Factor II was .242 and that between Factor I and Factor III was .500. These findings led him to con-

clude that: "It is apparent . . . that the factors are not orthogonal. Therefore, Factors I, II, and III are apparently interrelated" (23, p. 102).

Using Thurstone's well-known test of Primary Mental Abilities, Clark (7) studied changes in the mental pattern of boys aged 11, 13, and 15 years. She found that, with the exception of memory, there was a consistent drop in the intercorrelations of these abilities with increasing age, and that this trend was not influenced by the general intelligence level of the subjects.

Reichard (26), on the other hand, using a battery consisting of three verbal, two number, one spatial, and two memory tests to study the changes in mental organization occurring in boys and girls aged 9, 12, and 15 years, found a consistent increase in her inter-test correlations for both sexes between the 9 and 12 year age levels. The increase for boys was much more marked than was the increase for girls. After the age of 12 years the expected decrease occurred in both sexes. For girls this decrease was so great that the mean intercorrelation for 15-year-olds was below that for 9-year-olds. But in the case of boys the mean intercorrelation for 15-year-olds remained somewhat greater than the mean intercorrelation for 9-year-olds. The average loadings of the first centroid factors which were extracted from the correlation matrices confirmed the trends shown by the mean inter-test correlations.

Recalling the results of the study of Garrett, Bryan, and Perl on these same three age groups, it is apparent that Reichard's results in part confirm and in part contradict those of the former. However, it should also be noted that Reichard's battery was not as heavily loaded with memory tests as was the battery of Garrett, Bryan, and Perl.

An experiment employing the method of factor analysis used by the present investigator, i.e., the bi-factor solution, was conducted by Swineford and Holzinger (34). For their study a battery consisting of three each of verbal, spatial, speed, and memory tests, plus one general test, was administered to 457 seventh and eighth grade boys and girls. One year later 385 of the original group were retested using the same battery plus the Woody-McCall Mixed Fundamentals test. Their results showed that at the seventh and eighth grade level the common factors accounted for approximately 45 per cent of the total variance, and that one year later these same tests produced common factors which accounted for nearly 53 per cent of the total variance. It should be noted that these results exhibit a trend similar to that reported by Reichard, even though a different method of factor analysis was used.

Swineford (33) administered a battery of six tests to 212 pupils in the

eighth grades of seven different schools in the Autumn of 1944, and administered the tests again a year later to these same pupils when they were in the ninth grades. She also tested 173 pupils in the seventh grade in 1944, and retested the same pupils when they were in the ninth grade in 1946. The bi-factor analysis yielded a general and a verbal factor, both of which Swineford concluded could be given the same interpretation at all three grade levels (33, p. 263). She also studied the differentiation of the factor patterns at the three age levels to determine whether or not her data would support the hypothesis that, with increase in age, "individuals tend toward the increasing use of their 'special abilities' with a corresponding decrease in the use of 'general ability' " (33, p. 263). She found no evidence to support the hypothesis, but, on the contrary, found that with increase in age, the general factor increased in both its absolute and relative contribution to the total test variance (33, p. 271).

The relationship between general and group factors has also attracted the attention of workers in other fields of ability. For instance, Babcock and Emerson (2) found a consistent increase in the mean rank order correlations between six of the seven sub-tests of the MacQuarrie test of Mechanical Ability and the Terman Vocabulary Test for subjects between the ages of 14 and 17 years, and also between the ages of 17 years and adulthood (20 to 28 years). In the one remaining sub-test there was a decrease in the mean rank order correlations between the ages of 14 and 17, but none between the latter mentioned age groups.

The experiment that covers the largest age range was that of Balinsky (13), who studied six different groups ranging in age from 9 to 59 years. His subjects were selected from those who had been used for the standardization of the *Wechsler-Bellevue Intelligence Scale*. Several interesting findings were reported, among which were: (a) a general factor common to all the tests appeared at the age of 9, became submerged during the intervening years, then reappeared in the 50 to 59 year group; (b) the average of the sub-test intercorrelations decreased from age 9 to the 25 to 29 year age group, and then progressively increased up to the 50 to 59 year age group; (c) the percentage of variance attributable to the first factor decreased from 38 per cent at age 9 to 20 per cent at the 25 to 29 age level, and then increased again to 45 per cent at the 50 to 59 age level; (d) there was a definite tendency for sub-tests to be found in different clusters at different age levels.

A critical examination of the studies reported in this section revealed a general agreement that there was a differentiation in the factor pattern of girls after the age of nine years, even though this differentiation was not



as marked in those studies in which memory tests played a minor rôle as it was in the studies using batteries more heavily loaded with such tests. In the case of boys the differentiation of the factor pattern usually did not become apparent before the age of 12 years unless the batteries were quite heavily loaded with memory tests. In those studies in which verbal, number, and spatial tests played a more important rôle, the results were both confusing and inconclusive. Therefore an independent test of the differentiation hypothesis using non-memory tests seemed to be justified.

### C. PREVIOUS WORK ON THE EFFECT OF TEST DIFFICULTY

The usual method of studying shifts in the factor pattern is to use the same tests for subjects of all ages (29, p. 59). It is evident that this technique does not control the difficulty of the test material as judged by the mean scores of the subjects, but it is tacitly assumed that this difference in mean scores is merely an additive factor which has no effect upon the intercorrelations of the tests, or upon their factorial patterns, provided the tests have sufficient range to insure that the scores for the different age groups tested are not significantly skewed.

However, a review of the research concerning the effects of test difficulty both upon inter-test correlations and factorial patterns revealed several interesting and significant findings.

Hertzman (17) analyzed data obtained by Smith (32) on 180 college men using four numerical and three spatial tests. He found that by dividing each of the tests into two parts, an easy and a difficult part, and by scoring the subjects separately upon each of these parts, the resulting inter-test correlations were different. He concluded that: "Other factors being equal, differences in the level of the same kind of material result in a depression of the correlation between samples of it . . . the easy and the difficult items consequently cannot be thought of as measuring exactly the same ability" (17, p. (64).

Observation of the fact that "As difference between two levels of difficulty increases, there is a drop in the correlation which measures relationship between performance at the two levels" (28, p. 5), led Sargent to conduct a rather ingenious piece of research. He trained 15 college students, all of whom were majoring in psychology, to "talk out" the thought processes they engaged in while solving problems of varying degrees of difficulty. In addition to his work with these students he tested an additional 50 college students individually, and 317 college students using the group method. In all cases the test employed was one composed of 40 disarranged words classified as easy, medium, and difficult. His conclusion was that, "Hereto-

fore it has been assumed that easy and difficult levels of a problem differ only in degree; these results suggest that, in terms of mental processes involved, they tend to be different kinds of problems" (28, p. 54).

Studies of the effect of difficulty upon factorial pattern were made by Ferguson (10) and by Guilford (15). Ferguson showed that, theoretically, tests which were similar in difficulty should correlate more highly than tests separated by wide differences in difficulty level. He made an empirical test of this theory by administering six difficulty levels of a *Moray House Verbal Intelligence Test* to 11-year-old children. The first factor loadings of each test tended to decrease as the tests became either more or less difficult than the two middle tests of the battery. The second factor had positive loadings on the easy sub-tests, approximately zero loadings on tests of mean difficulty, and negative loadings on the sub-tests of greater than mean difficulty. In direct support of his theory he found that at each point in the scale, tests of approximately equal difficulty were more nearly alike in their factorial composition than were the tests separated by wide differences of difficulty.

Guilford (15) analyzed the 10 sub-tests of the Seashore test of pitch discrimination. He found that the loadings of the one factor which accounted for the greatest share of the variance decreased systematically with increasing difficulty. Two other factors were found, but we are not immediately concerned with their interpretation. From this study we may infer that the first factor loading on the easier forms of tests should be higher than the first factor loadings on the more difficult forms of the same material, other things being equal.

Three important conclusions can be drawn from the results of these studies. First, differences in the difficulty levels of tests directly affect both the intertest correlations and the factor pattern which emerge from them. Second, minimizing the differences in difficulty among tests increased their intercorrelations, and hence the observed degree of relationship among them. Third, the same item measures one ability on one level of difficulty, and a different ability on a different level of difficulty.

In view of these facts, the previously mentioned "tacit assumption" of many investigators that using the same form of one test for more than one age level will not directly affect inter-test correlations and factor patterns is here questioned, because scores obtained on a test by younger subjects are not obtained from the same difficulty levels as are scores obtained by older subjects on the same test. When children of two or more different ages are given the same test, the scores of the older subjects consist of correct responses to:

(a) Items which for them were much easier than were any of the items for the younger subjects; (b) items which for them were of average difficulty as was an entirely different group of items for younger subjects; (c) a small number of items which for them were relatively very difficult as was a much larger number of items for the younger subjects.

A consideration of all of the above facts led the investigator to consider whether or not minimizing the differences in the relative difficulty of tests for two populations of different ages might not increase the observed degree of relationship between the two age groups.

#### D. DESIGN OF THE EXPERIMENT

The review of the literature dealing with changes in mental organization with age seemed to justify an independent test of Professor Garrett's hypothesis that "Abstract or symbol intelligence changes in its organization as age increases from a fairly unified and general ability to a loosely organized group of abilities or factors" (12, p. 373). In addition, a study of the literature dealing with the effect of differences of difficulty level upon the intercorrelations of tests established the need for testing the hypothesis of the investigator that: The observed differences between the factor patterns for two age groups are due not only to the age differences of the groups in question but also to the differences in the difficulty levels of the test materials for the two populations.

The experiment reported in this study was specifically designed for the purpose of testing these two hypotheses. Each of the tests to be used was to consist of two forms which were similar in content but which differed in difficulty level. Form I was to be approximately as difficult for the younger children as was Form II for the older children. The two groups selected were to be well separated in age, of the same sex, and homogeneous with respect to racial and cultural background. Each form of each test was to be administered to both the younger and the older age groups, and the results were to be submitted to a factorial analysis using the bi-factor method.

By the first hypothesis, the factor pattern of the older subjects should, form by form, exhibit greater differentiation than should the factor pattern of the younger subjects for the same forms.

By the second hypothesis, the differentiation of the factor pattern of the younger age group on Form I should be more nearly like that of the older subjects on Form II than like that of the older subjects on Form I, and the degree of differentiation of the younger age group on Form II should be least like that of the older age group on Form I.



## II. THE EXPERIMENT

### A. THE POPULATION

The younger subjects used in this experiment were 103 white boys aged 9 years to 9 years 11 months. The older subjects were 115 white boys aged 12 years to 12 years 11 months. They were all regularly enrolled in four elementary schools in Springfield, Illinois.

The subjects may be described as a cross section of the school population of a typical mid-western city, excluding the exceptionally under-privileged and foreign speaking groups. All were able to speak, understand, read, and write simple English. A careful check of the public school records showed that there was no adverse selection due to the more brilliant boys having been promoted to another school. By testing 9 and 12-year-old boys, and by conducting the program in a system in which the children were kept in the same building from the kindergarten through the first eight grades, all persons within the age ranges regularly enrolled in the public schools were reached. The few that were absent or turned in defective papers were excluded from the experimental group.

It is possible that this experimental population was slightly above the national average in intelligence. Recently obtained scores which were available for the fourth grade in the system showed that pupils in the four schools tested tended to be somewhat superior in ability. A group that was slightly superior in ability but homogeneous with respect to race and cultural background was to be preferred in this study to a more nearly normal but heterogeneous sample (19, pp. 24-33). The standard deviations of the scores obtained indicate that the range of ability was not seriously truncated.

### B. CONSTRUCTION OF THE TESTS

Verbal, number, and spatial materials were selected for test content because the character of the changes in the relationships among these factors between the ages of 9 and 12 years seemed to be more uncertain than were the changes between any one of them and memory.

Each test was constructed by first assembling a common pool of items for it. In some cases bi-serial coefficients of correlations between the several items and the common pool were available. In other cases the pool was made up of a collection of items from a test which had been subjected to careful study by its author. For approximately half of the tests, there were data showing the per cent of typical 9-year-old children and of typical 12-

year-old children who had on other occasions passed each item. In some cases the items had been scaled by the authors of the tests from which they were drawn and these data were available. In all cases enough was known about the difficulty of the items to enable the investigator to place them in the 9-year-old form or the 12-year-old form on the basis of their difficulty. The items comprising the 10 tests used in this study were gathered from four sources.

(a) Professor F. H. Finch of the College of Education of the University of Illinois very generously made available five groups of unpublished, experimental items. For many of these items the bi-serial coefficient of correlation between the several items and their respective pools were available. For each one, there was accurate information concerning its difficulty for younger and older children. The difference in the difficulty level for children separated in age furnished an indication of each item's ability to discriminate between younger and older subjects.

From these five groups, carefully matched items were drawn to make two forms each of the following tests: "Finding Middle Number," "Number Series," "Number Patterns," "Figure Exercises," and "Boys and Girls."

(b) The University of Chicago Press granted permission to use items drawn from the "Chicago Mental Growth Battery," by Freeman and Wenger. All items in this battery are scaled on the basis of difficulty. From this source items were drawn to make two forms of the "Paper Form Board," the "Vocabulary," the "Opposites," and the "Word Grouping" tests. The preliminary trial, to be described later, showed that the "Paper Form Board" was not satisfactory for this experiment, so it was dropped.

(c) The World Book Company granted special permission to reproduce and use the items in the Figure Dividing Section of the "Pintner General Ability Tests: Non-Language Series, Forms *K* and *L*." These items were supplemented by a group of 24 similar items constructed by the experimenter, and from this combined pool, items were drawn to make two forms of the "Figure Dividing" test.

(d) The remaining test entitled "Arithmetic Reasoning" was developed by the experimenter after a careful analysis of the types of verbal problems employed in standard arithmetic texts.

It will be recalled that the design of this experiment necessitated the use of one form of each test which would be as difficult for younger subjects as was the second form for older subjects. The two forms of each test were constructed by alternately drawing items for those tests from their respective pools. An item of a given difficulty level for boys aged nine years

was drawn for Form I, then an item of the same difficulty level for boys aged 12 years was drawn for Form II. This method of drawing items more nearly assured homogeneity of content and of difficulty than might have been secured had either of the forms been made first.

The system employed in distributing item difficulty in each form was based upon a rough approximation to the normal curve. If the two forms were to contain 30 items each, the first item in Form I would have a "*p*," per cent passing, of 90 or above for children aged nine, the first in Form II would have a "*p*" of 90 or above for children aged 12; two items in each form would have "*p*'s" between 80 and 90; five or six items in each form would have "*p*'s" between 60 and 80; 12 to 14 items in each form between 40 and 60; five or six items in each form between 20 and 40; and two or three items in each form would have "*p*'s" below 20.

In all probability this method of distributing item difficulty had a great deal to do with the general tendency of the distributions of total scores to be platykurtic. It is apparent that in such a distribution of difficulty, approximately two-thirds of the items were within 20 per cent of the 50 per cent difficulty point. Cook's (8) investigation of the effect of the distribution of word difficulty upon the shape of the distribution of total spelling scores showed that concentrating words at the 50 per cent tended to produce a flat distribution.

### C. DESCRIPTION OF THE TESTS

#### 1. *Finding Middle Number*

The items in this test consisted of five or seven numbers in a disarranged order. The subjects were instructed to "find the middle-sized number" or the one which "if the numbers were in order from the smallest to the largest . . . would be in the middle," and to fill in the space under it. In Form I, the five numbers in each item varied in size from one to four digits. In Form II, 15 items consisted of five numbers varying in size from three to five digits, nine items consisted of seven numbers of three or four digits each, and one item was defective because it inadvertently contained six, an even number, of parts. Number of items in each form (including the defective item in Form II), 25; working time for each form, 7 minutes.

#### 2. *Number Series*

This test was in multiple choice form, the correct answer being one of the five numbers in the adjacent column to the right, headed "next number." The subjects were directed to "find the rule" for each row, then to use this

rule "to figure out what number should come next, and to fill in the space under it." Since they were required to use one of the five choices in the second column, ambiguities could be eliminated by failing to include among the answers any numbers that could be obtained by alternate solutions. Number of items in each form, 26; working time for each form, 10 minutes.

### 3. *Number Patterns*

This test was essentially an adaptation of the number series problem. In the problem of Form I, a row of two numbers, and a second row with a missing number were placed in a square. The subjects were shown how to solve the problem by starting with the first number in a row and figuring out what mathematical computation was performed to get the second number in the same horizontal row. They were then shown that doing "the same thing" to the first number in the second row would give them the missing number for the answer, which was always one of the five numbers below the square. The problem was varied in Form I by using both addition and subtraction and by changing the position of the required answer. In Form II, all four of the fundamental arithmetic processes were used, the position of the required answer was changed, the pattern was increased to nine numbers, and varying numbers of figures in the horizontal rows were omitted. Number of items in each form, 30; working time for each form, 10 minutes.

### 4. *Figure Exercises*

This test was essentially spatial analogies. Three figures and a blank space were enclosed in a square. There were five figures below the square, one of which belonged in the blank space. By means of the practice exercise and the verbal explanation, the subjects were led to find the relationship between the first and the second figure, and to use this relationship, starting with the third, to find the fourth figure. The correct figure for the blank space was always the one which bore the same relation to the third as did the second to the first. Number of items in each form, 24; working time for each form 8 minutes.

### 5. *Figure Dividing*

This test consisted of horizontal rows of drawings. In each row, there was first a closed figure, then four line drawings, then a group of pieces which had been cut from the first figure. One of the line drawings would



cut the first figure into the pieces shown in the last group. The subjects were directed to fill in the blank space under the line drawing which would cut the first figure so as to make it look like the last one. Number of items in each form, 30; working time for each form, 8 minutes.

#### 6. *Boys and Girls*

The "Boys and Girls" were drawings of small, doll-like figures of children, the first figure in each row being separated from the rest by a dotted line. The subjects were directed to "look at the first picture to see how the arms are held," then to "make a mark" on that one of the five remaining pictures in the row which held the arms in the same position as did the first child. The figures were both revolved in the plane of the paper and rotated on their own major axes. Thus the first figure might be standing upright, facing the reader and holding the right arm above the head. The correct answer might be a figure which was turned so that the head was down and the back was to the reader, but it would be the only one in the row holding the right arm above the head. Number of items in each form, 27; working time for each form, 9 minutes.

#### 7. *Vocabulary*

This test was made up of rows of six words each, a single word being placed to the left of a vertical line and the five other words or phrases to the right of the line. The subjects were directed to fill in the space under the word or phrase to the right of the line which had the same meaning as the word to the left of the line in that row. Number of items in each form, 27; working time for each form, 9 minutes.

#### 8. *Vocabulary*

This test was made up of rows of six words each, a single word being placed to the left of a vertical line and the five other words or phrases to the right of the line. The subjects were directed to fill in the space under the word or phrase to the right of the line which had the same meaning as the word to the left of the line in that row. Number of items in each form, 30; working time for each form, 6 minutes.

#### 9. *Opposites*

The form of the "Opposites" test was much like that of the Vocabulary test, the only difference being that the subjects were directed to mark the word whose meaning was the exact opposite of the key word located to the

left of the vertical line. Number of items in each form, 30; working time for each form, 6 minutes.

#### 10. *Word Grouping*

In this test each item was made up of five words or phrases. The subjects were told that four of these words or phrases belonged together in some way, but that one did not belong with the rest. They were directed to fill in the space beneath the latter word or phrase. Number of items in each form, 30; working time for each form, 8 minutes.

#### 11. *Arithmetic Reasoning*

In constructing this test, several series of elementary arithmetic texts were examined to determine the types of verbal problems boys aged nine and boys aged 12 years were customarily required to work. The same types of problems, using very simple number combinations and relatively simple language, were used. The subjects were permitted to use an extra sheet of paper on which to work their problems if they wished. Number of items in each form, 30; working time for each form, 10 minutes.

#### 12. *Paper Form Board*

This test was unsatisfactory and was replaced by the "Boys and Girls" test after the preliminary trial.

The tests were assembled into 10 booklets. The cover page provided space for the subject's name, sex, grade, school, city, age, and date of birth. The cover page also contained examples and whatever directions the subject was to read prior to starting the test. The booklet for each test was so assembled that Form I followed the cover page, face up, and Form II followed Form I, back to back.

The directions for working both forms were the same for all tests throughout the entire battery. The subjects were told to continue working through the pages of Form I until they reached the blank page in the middle of the booklet. This blank page was, of course the back of the last page of Form II of the test. They were directed to check their work on Form I and after checking, to wait quietly for further directions. Upon the expiration of the allotted time the subjects were asked to stop, close their test booklets so that their names would be on top, turn the whole booklet over, and start working on the second part, continuing until they again reached the blank page in the middle. They were directed to check their answers to the questions in this part of the test, but were told not to turn back to the material in the first part of the test.

#### D. PRELIMINARY TRIAL

To verify difficulty levels of the two forms as well as their ability to discriminate between older and younger subjects, a preliminary trial of the test materials was held in the elementary school of Staunton, Illinois, during the last week of February, 1947. The test included all children in grades four through eight, and in addition, children who had reached their ninth birthdays, but who were still in grades lower than the fourth. Complete notes were taken on such matters as optimum working times, desirable changes in the manuals, typographical errors in the mimeographed materials, and subjects' attitudes toward the different tests.

The tests were then carefully scored. On the basis of the mean scores of boys and of girls at each age level, and the notes taken at the time of testing, manuals and tests were revised. The "Paper Form Board" test was eliminated from the battery, because it did not discriminate between the two age groups. The test, "Boys and Girls," was developed then to replace the "Paper Form Board." Several of the other tests were revised to make Form I more nearly of 50 per cent mean difficulty for boys nine years of age and Form II of more nearly 50 per cent mean difficulty for boys aged 12. Minor revisions were made in the manuals and the time limits were established.

#### E. TESTING PROCEDURE

The revised tests were administered in the Springfield schools between April 22 and April 29, 1947. Three sessions of approximately 90 minutes each were required to complete the battery. In every school, the work was scheduled so that each age group had one session in the morning and another the same afternoon. The third session was held within 48 hours of the other two. At each session at least one test involved numbers, another verbal material, and a third spatial material. The various tests were given in a different order to each group, and the order was so varied that it could have had little systematic effect upon the scores of the subjects.

The general testing conditions were excellent. Besides the examiner in charge, an adult assistant was present at all times in the larger groups. All examinations were conducted by the supervisor of testing in the Springfield schools or by the experimenter. The usual precautions were taken to prevent copying. The subjects were told that they were part of an experiment and that although the scores on the tests would not affect their school marks, their scores would be returned to them so they could see how well they had done. The general atmosphere was conducive to good work at all times.

## F. RELIABILITY AND INTER-FORM CORRELATION

The reliabilities of the tests as measures of the abilities of the age groups studied in this experiment were not known prior to their use with the experimental population. This information is particularly important in factor studies, because the factorial analysis of unreliable measures makes the meaning of the factors extracted extremely uncertain.

Guttman's (16) lower bound,  $L_b$ , was used as the measure of reliability. The formula involves a summation of the item variances as well as the variance of the total test. To obtain the item variances the papers were so scored that the per cent passing each item could be computed. The lower bound of reliability of Form I, Form II, and of the Combined Form, was computed for the experimental population of 9-year-old boys and of 12-year-old boys, separately. These lower bounds are reported in Table 1 for the younger group, and in Table 2 for the older group.

TABLE 1  
LOWER BOUNDS OF RELIABILITY FOR BOYS AGED 9 YEARS

Test	Form I	Form II	Combined Form
1	.934	.756	.929
2	.926	.875	.944
3	.961	.761	.936
4	.910	.901	.947
5	.939	.888	.950
6	.805	.883	.912
7	.919	.700	.914
8	.848	.638	.866
9	.884	.749	.909
10	.867	.741	.898

READ: For test 1, the lower bound of reliability of Form I was .934; of Form II, .756; of the Combined Form, .929; etc.

## NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

It may be noted that the reliabilities of each form based upon data from each age group are generally as high as those ordinarily reported for psychological tests. The lowest bound for subjects aged nine years is that of Form II of Test 8, which is .638. The lowest bound for any of the tests at the 12-year level is .593, that of the reliability of Form II of Test 7.

The correlations between the two forms of each of the 10 tests used in this

TABLE 2  
LOWER BOUNDS OF RELIABILITY FOR BOYS AGED 12 YEARS

Test	Form I	Form II	Combined Form
1	.955	.868	.956
2	.950	.946	.971
3	.967	.915	.961
4	.919	.909	.951
5	.896	.838	.913
6	.884	.942	.954
7	.866	.593	.866
8	.826	.674	.858
9	.823	.758	.876
10	.872	.819	.918

READ: For test 1, the lower bound of reliability of Form I was .955; of Form II, .868; of the Combined Form, .956; etc.

NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 3  
CORRELATION OF FORM I AND FORM II OF EACH OF THE TEN TESTS

Test number	I II	I II
	Boys aged 9 years	Boys aged 12 years
1	.657	.769
2	.749	.845
3	.230	.531
4	.811	.827
5	.736	.709
6	.749	.797
7	.704	.714
8	.697	.673
9	.784	.744
10	.747	.841

READ: For test 1, the correlations between Form I and Form II for boys aged nine years was .657, for boys aged 12 years .769, etc.

NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

study are given in Table 3. For boys aged nine years, seven of the correlations were larger than .70, two were between .65 and .70, and one, that for Test 3, was .230. The second form of this test was extremely dif-

sicult for this group and this fact no doubt contributed to the low correlation. For boys aged 12 years, the correlations between the two forms exceeded .70 in eight of the 10 tests. Of the two remaining tests one had a correlation of .673 between the two forms. The correlation in the case of Test 3 had risen some 30 points, now being .531.

It should be pointed out again that these are not equivalent forms in the sense in which this term is generally used. They are two forms having similar content that were intended to differ in difficulty. We should therefore expect these correlations to be somewhat lower than would have been the case had the forms been equivalent.

### III. DESCRIPTION OF THE DATA

The following discussion will contain a very complete and detailed description of the data obtained in this study. This is essential because of the general inadequacy of existing error formulae for factor coefficients and residuals. Holzinger's bi-factor solution is the only method of factor analysis for which such error formulae exist and he very strongly advises that they be used "with great caution and with a full realization of the underlying assumptions," many of which are only roughly satisfied in most empirical data (18, p. 131). Even if adequate error formulae existed, we still would know all too little of the conditions under which factors emerge because factors certainly are not entities independent of the conditions in which they are found. Kelley has expressed this point well when he said: "There is no search for timeless, spaceless, populationless truth in factor analysis; rather, it represents a simple, straightforward problem of description in several dimensions of a definite group functioning in definite manners, and he who assumes to read more remote verities into the factorial outcome is certainly doomed to disappointment" (20, p. 120). Essentially the same idea was expressed by Garrett who stated, ". . . factors (are) . . . (a) experimentally determined, (b) operationally defined, and (c) subject to tests of validity" (11, p. 295).

#### A. THE DISTRIBUTION OF SCORES

The distributions of the scores for boys aged nine years and for boys aged 12 years on each form of each of the 10 tests are described in terms of their respective means, standard deviations, and third and fourth moments expressed in standard units. The first two descriptive constants are commonly used in educational and psychological literature. Since the third and fourth moments are not as familiar, a brief explanation of each may be helpful.

When the third moment is taken about the mean, it is a measure of skewness (21, p. 71). If the distribution is symmetrical, its value is zero. If the distribution is not symmetrical its sign indicates the direction of skewness. The third moment expressed in standard units is denoted by the Greek letter alpha and its symbol is " $\alpha_3$ ". It is defined as the mean of the third powers of the deviations from the mean of the distribution divided by the third power of the standard deviation. Since  $\alpha_3$  is independent of the type of distribution and of the unit of measurement, it is a more satisfactory measure for comparing the symmetry of the distributions in this experiment than are the more commonly used measures.

The fourth moment taken about the mean is a measure of kurtosis (21, p. 71). When expressed in standard units it, too, is denoted by alpha, its symbol being " $a_4$ ". By definition,  $a_4$  is the mean of the fourth powers of the deviations taken from the mean, divided by the fourth power of the standard deviation of the distribution. Since, like  $a_3$ , it is independent of both the shape of the distribution and of the unit of measurement, it too is more suitable for use in this study than are the more commonly employed measures. Its value for the normal curve is three. If  $a_4$  is greater than three, the distribution is leptokurtic; if less than three, it is platykurtic.

To facilitate comparisons, the constants of the distribution for the two age groups on the different forms of the tests have been assembled in separate tables. It is not possible to compare the means and standard deviations of the various tests directly because these are in terms of raw scores. However, the measures of skewness and kurtosis are directly comparable because they are expressed in terms of the appropriate powers of the standard deviations of their respective distributions.

These data for nine year old boys on Form I, Form II, and the Combined Form are presented in Tables 4, 5, and 6, respectively. Table 4

TABLE 4  
MEAN, STANDARD DEVIATION,  $a_3$  AND  $a_4$  OF THE DISTRIBUTION OF SCORES FOR BOYS AGED 9 YEARS ON FORM I OF EACH OF TEN TESTS

Test	Mean	Standard Deviation	Skewness $a_3$	Kurtosis $a_4$
1	9.68	7.04	0.50	2.08
2	11.51	7.11	0.39	1.88
3	13.03	9.96	0.40	1.65
4	9.88	6.50	0.79	2.36
5	22.17	7.40	-1.15	3.09
6	11.31	4.80	0.59	2.86
7	17.74	7.03	-0.34	1.80
8	15.87	5.16	-0.25	2.41
9	17.03	6.56	-0.26	2.07
10	9.76	4.95	0.25	2.26

READ HORIZONTALLY: The mean of Test 1 is 9.68, its standard deviation is 7.04, skewness ( $a_3$ ) is positive 0.50, and its kurtosis ( $a_4$ ) is 2.08, which indicates that it is flatter than the normal curve.

READ VERTICALLY: The mean of Test 1 is 9.68, of Test 2, 11.51, etc.; the standard deviation of Test 1 is 7.04, of Test 2, 7.11, etc.; the skewness ( $a_3$ ) of Test 1 is 0.50, of Test 2, 0.39, etc.; and the kurtosis ( $a_4$ ) of Test 1 is 2.08, of Test 2, 1.88, etc.

#### NAMES OF TESTS

1. Finding Middle Number
2. Number Series
3. Number Patterns
4. Figure Exercises
5. Figure Dividing

6. Boys and Girls
7. Vocabulary
8. Opposites
9. Word Grouping
10. Arithmetic Reasoning



TABLE 5  
MEAN, STANDARD DEVIATION,  $a_3$  AND  $a_4$  OF THE DISTRIBUTION OF SCORES FOR BOYS AGED  
9 YEARS ON FORM II OF EACH OF TEN TESTS

Test	Mean	Standard Deviation	Skewness $a_3$	Kurtosis $a_4$
1	4.34	3.34	0.86	3.06
2	5.54	4.95	1.14	3.78
3	3.82	3.35	1.43	5.04
4	9.49	6.17	0.70	2.35
5	16.43	6.67	-0.29	2.43
6	6.94	5.37	1.54	5.07
7	9.81	3.72	-0.03	3.02
8	9.31	3.55	0.11	2.67
9	9.61	4.52	0.48	2.96
10	3.77	2.83	0.64	2.82

READ HORIZONTALLY: The mean of Test 1 is 4.34, its standard deviation, 3.34, skewness ( $a_3$ ) is positive 0.86 and its kurtosis ( $a_4$ ) is 3.06, which indicates that it is approximately normal.

READ VERTICALLY: The mean of Test 1 is 4.34, of Test 2, 5.54, etc.; the standard deviation of Test 1 is 3.34, of Test 2, 4.95, etc.; the skewness ( $a_3$ ) of Test 1 is 0.86, of Test 2, 1.14, etc.; and the kurtosis ( $a_4$ ) of Test 1 is 3.06, of Test 2, 3.78, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

shows that four of the distributions were negatively skewed and that six were positively skewed. Nine of the curves were platykurtic and the remaining one was practically normal. Examining the constants for Form II recorded in Table 5 we find that there has been a decided shift toward positive skewness, there now being eight distributions so skewed and only a relatively slight negative skewness in the other two. Also we find that in comparison with Form I, eight of the distributions were more leptokurtic, that of test five was more platykurtic, and that of test four showed practically no change.

The constants for the scores on the Combined Form shown in Table 6 reveal the expected general increase in the standard deviations. Six of the distributions were positively skewed, three showed slight negative skewness, and that of Test 5 showed marked negative skewness. Eight of the curves were definitely platykurtic, Test 5's was practically normal, and the curve of Test 6 was leptokurtic.

Similar presentations of the data for 12-year-old boys on Form I, Form II, and the Combined Form are to be found in Tables 7, 8, and 9, respectively. The distributions of scores for all tests in Form I reported in Table 7 showed negative skewness. Half of the distributions were leptokurtic and the other half

TABLE 6

MEAN, STANDARD DEVIATION,  $a_2$  AND  $a_4$  OF THE DISTRIBUTION OF SCORES FOR BOYS AGED 9 YEARS ON COMBINED FORM OF EACH OF 10 TESTS

Test	Mean	Standard Deviation	Skewness $a_2$	Kurtosis $a_4$
1	14.02	9.57	0.66	2.49
2	17.06	11.28	0.74	2.59
3	16.84	11.22	0.55	2.30
4	19.38	12.05	0.81	2.43
5	38.60	13.11	-0.88	2.94
6	18.25	9.51	1.12	4.06
7	27.54	10.00	-0.22	1.88
8	25.18	8.05	-0.10	2.45
9	26.56	10.61	-0.12	2.22
10	13.52	7.31	0.37	2.51

READ HORIZONTALLY: The mean of Test 1 is 14.02, its standard deviation is 9.57, skewness ( $a_2$ ) is positive 0.66, and its kurtosis ( $a_4$ ) is 2.49 which indicates that it is flatter than the normal curve.

READ VERTICALLY: The mean of Test 1 is 14.02, of Test 2, 17.06, etc.; the standard deviation of Test 1 is 9.57, of Test 2, 11.28, etc.; the skewness ( $a_2$ ) of Test 1 is 0.66, of Test 2, 0.74, etc.; and the kurtosis ( $a_4$ ) of Test 1 is 2.49, of Test 2, 2.59, etc.

## NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 7

MEAN, STANDARD DEVIATION,  $a_2$  AND  $a_4$  OF THE DISTRIBUTION OF SCORES FOR BOYS AGED 12 YEARS ON FORM I OF EACH OF 10 TESTS

Test	Mean	Standard Deviation	Skewness $a_2$	Kurtosis $a_4$
1	16.68	7.82	-0.71	2.07
2	18.06	7.67	-0.78	2.24
3	22.11	9.25	-1.00	2.48
4	14.37	6.75	-0.23	1.73
5	25.97	4.63	-2.30	7.91
6	17.52	6.02	-0.37	2.14
7	24.77	4.49	-1.68	5.63
8	21.95	4.62	-1.42	5.84
9	23.24	4.71	-1.33	5.14
10	19.86	5.40	-0.65	3.43

READ HORIZONTALLY: The mean of Test 1 is 16.68, its standard deviation 7.82, skewness ( $a_2$ ) is negative 0.71 and its kurtosis ( $a_4$ ) is 2.07, which indicates that it is flatter than the normal curve.

READ VERTICALLY: The mean of Test 1 is 16.68, of Test 2, 18.06, etc.; the standard deviation of Test 1 is 7.82, of Test 2, 7.67, etc.; the skewness ( $a_2$ ) of Test 1 is negative 0.71, of Test 2, negative 0.78, etc.; the kurtosis ( $a_4$ ) of Test 1 is 2.07, of Test 2, 2.24, etc.

## NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 8  
MEAN, STANDARD DEVIATION,  $a_3$  AND  $a_4$ , OF THE DISTRIBUTION OF SCORES FOR BOYS AGED  
12 YEARS ON FORM II OF EACH OF 10 TESTS

Test	Mean	Standard Deviation	Skewness $a_3$	Kurtosis $a_4$
1	9.25	5.12	0.04	2.26
2	12.72	7.92	-0.07	1.66
3	9.82	6.79	0.80	3.49
4	13.56	6.41	-0.38	1.91
5	21.50	5.20	-1.27	4.55
6	13.27	8.03	0.19	1.70
7	13.58	3.10	-0.72	3.63
8	14.03	3.69	-0.30	2.93
9	15.00	4.85	0.07	2.76
10	11.10	4.37	-0.47	2.60

READ HORIZONTALLY: The mean of Test 1 is 9.25, its standard deviation is 5.12, skewness ( $a_3$ ) is positive 0.04 and its kurtosis ( $a_4$ ) is 2.26, which indicates that it is flatter than normal.

READ VERTICALLY: The mean of Test 1 is 9.25, of Test 2, 12.72, etc.; the standard deviation of Test 1 is 5.12, of Test 2, 7.92, etc.; the skewness ( $a_3$ ) of Test 1 is positive 0.04, of Test 2, negative 0.07, etc.; the kurtosis ( $a_4$ ) of Test 1 is 2.26, of Test 2, 1.66, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 9  
MEAN, STANDARD DEVIATION,  $a_3$  AND  $a_4$ , OF THE DISTRIBUTION OF SCORES FOR BOYS AGED  
12 YEARS ON COMBINED FORM OF EACH OF 10 TESTS

Test	Mean	Standard Deviation	Skewness $a_3$	Kurtosis $a_4$
1	25.93	12.20	-0.45	1.96
2	30.78	14.97	-0.41	1.82
3	31.93	14.08	-0.33	2.20
4	27.83	12.51	-0.28	1.79
5	47.48	9.05	-1.87	6.58
6	30.79	13.33	0.04	1.83
7	38.36	7.05	-1.13	5.11
8	35.98	7.61	-1.10	4.88
9	38.16	8.84	-0.70	3.41
10	30.97	9.38	-0.59	2.98

READ HORIZONTALLY: The mean of Test 1 is 25.93, its standard deviation 12.20, skewness ( $a_3$ ) is negative 0.45 and its kurtosis ( $a_4$ ) is 1.96, which indicates that it is flatter than the normal curve.

READ VERTICALLY: The mean of Test 1 is 25.93, of Test 2, 30.78, etc.; the standard deviation of Test 1 is 12.20, of Test 2, 14.97, etc.; the skewness ( $a_3$ ) of Test 1 is negative 0.45, of Test 2, negative 0.41, etc.; and the kurtosis ( $a_4$ ) of Test 1 is 1.96, of Test 2, 1.82, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

were somewhat platykurtic. On Form II, as shown in Table 8, we find that the distributions were much more symmetrical, and that seven of them were platykurtic while the remaining three were slightly leptokurtic. On the Combined Form the expected increase in the standard deviations again concurred. Table 9 shows that there was a general tendency toward slight negative skewness and that six of the distributions tended to be platykurtic, whereas four tended to be leptokurtic.

### B. THE ADEQUACY OF THE TESTS

The data in Table 10 may be examined to determine how well these tests fulfilled the requirements set up in Section II. The ratios of the differences between the specified means to their respective standard errors are indicated in the several columns of this table. For purposes of this discussion a difference will be considered statistically significant when its entry exceeds 2.34. This ratio establishes the significance of the difference at approximately the one per cent confidence level. This is true because we are concerned in this study with positive differences, only.

TABLE 10  
RATIO OF DIFFERENCES BETWEEN SELECTED MEANS TO THEIR RESPECTIVE STANDARD ERRORS

Test	Form I, Age 9 Minus Form II, Age 9	Form I, Age 12 Minus Form II, Age 12	Form I, Age 12 Minus Form I, Age 9	Form II, Age 12 Minus Form II, Age 9
1	9.93	15.70	6.96	8.47
2	12.81	13.15	6.54	8.11
3	9.59	16.37	6.96	8.41
4	1.04	2.23	4.99	4.78
5	11.31	12.66	4.49	6.22
6	12.17	9.37	8.46	6.90
7	15.65	38.20	8.70	8.09
8	17.98	24.50	9.12	9.62
9	18.55	25.84	7.96	8.49
10	6.66	32.08	14.41	14.88

READ HORIZONTALLY: For Test 1, the difference between the means of the scores on Form I for boys aged 9 years and on Form II for boys aged 9 years was 9.93 times its standard error; the difference between the means of the scores on Form I for boys aged 12 years and on Form II for boys aged 12 years was 15.70 times its standard error; etc.

READ VERTICALLY: To secure for each of the tests the ratio between any desired difference and its respective standard error, read down the appropriate column.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 10 B  
RATIO OF DIFFERENCES BETWEEN SELECTED MEANS TO THEIR RESPECTIVE STANDARD ERRORS

Test	Comb., Age 12 Minus Comb., Age 9	Form II, Age 12 Minus Form I, Age 9	Form I, Age 12 Minus Form II, Age 9
1	8.06	-0.51	15.42
2	7.69	1.18	14.45
3	8.79	-2.75	19.82
4	5.08	4.19	5.58
5	5.75	-0.77	12.15
6	8.05	2.21	13.71
7	9.13	-5.53	26.92
8	10.15	-3.00	22.77
9	8.71	-2.57	21.59
10	15.39	2.12	27.94

READ HORIZONTALLY: For Test 1, the difference between the means of the scores on the Combined Form for boys aged 12 years and the Combined Form for boys aged 9 years was 8.06 times its standard error; the difference between the means of the scores on Form II for boys aged 12 years and on Form I for boys aged 9 years was -0.51 times its standard error; etc.

READ VERTICALLY: To secure for each of the tests the ratio between any desired difference and its respective standard error, read down the appropriate column.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

The first requirement was that Form I should be easier than Form II for both groups. An inspection of the second and third columns in Table 10 shows that for boys aged nine years and for boys aged 12 years Form I of each of the 10 tests was easier than Form II. In nine of the tests this difference was established with practical certainty. In Test 4, however, the difference was not statistically significant.

The second requirement was that each test in each form be easier for 12-year-old boys than for 9-year-old boys. The differences between the mean achievements of the two age groups on the tests in Form I and Form II are given in the third and fourth columns, respectively. The corresponding differences on the Combined Form are given in the second column of Table 10B. In every case the mean of the scores for boys aged 12 years was significantly higher than for boys aged nine years. Therefore the tests fulfilled the second requirement.

The third requirement was that Form I of each test be approximately as difficult for boys aged nine years as Form II was for boys aged 12 years. By checking the signs of the differences recorded in the third column of

Table 10B it will be noted that for Form I, six of the 10 tests were somewhat easier for the younger boys than was Form II for the older ones. In five cases the difference in relative difficulty was not statistically significant. Of the five significant differences, four favored the 9-year-olds and one the 12-year-olds. Thus we find that the third requirement was rather well fulfilled.

In view of the fact that reference will later be made to the differences between the factor patterns of boys aged 12 years on Form I and of boys aged nine years on Form II, the differences in the relative difficulty of these forms for their age groups should be pointed out at this time. The ratios recorded in the last column of Table 10B show that the differences between these means were larger than any that have been mentioned previously and were all highly significant. It will be recalled that the tests were so constructed that this combination should have presented the greatest difference between the sets of scores.

#### IV. THE FACTORIAL ANALYSES

The intercorrelations of the scores of each age group on Form I, on Form II, and on the Combined Form were analyzed by the bi-factor method. These analyses, as are all factor analyses, are somewhat crude, because there is no known way to determine precisely "when to stop factoring." A few general principles are accepted by most workers in this field and the present investigator has been guided by them. The first of these is that factor loadings which are less than .316 generally may be disregarded because they contribute less than 10 per cent to the variance of the test. The second principle is that *factor coefficients become questionable when they are less than three times their standard error*. This criterion, however, should be used with a great deal of caution because the standard errors may be somewhat too small or the assumptions underlying their use may not always be fulfilled (18, pp. 131-132). The third principle is that the analysis should not be carried so far that insignificant residuals are being analyzed. Again, the test for the significance of a residual is crude (18, p. 131) and should be used with great caution. There is also a subjective element involved in the determination of the significance of a residual because groups of small, but positive, residuals actually may be significant when the individual residuals that

TABLE 11  
INTERCORRELATIONS OF SCORES OF BOYS AGED 9 YEARS ON FORM I OF EACH 10 TESTS

Test	1	2	3	4	5	6	7	8	9	10
1										
2	.505									
3	.314	.530								
4	.365	.457	.377							
5	.280	.414	.336	.386						
6	.479	.440	.349	.529	.466					
7	.363	.442	.225	.325	.479	.500				
8	.370	.479	.340	.302	.520	.419	.796			
9	.405	.485	.279	.312	.476	.481	.855	.829		
10	.519	.571	.350	.254	.481	.401	.689	.700	.726	

READ: For each test read along the row to the diagonal and then down in the column carrying the test number. For instance, the correlation between Test 4 and each of the remaining tests from 1 to 10 respectively is read .365, .457, .377, .386, .529, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 12  
BI-FACTOR PATTERN OF SCORES OF BOYS AGED 9 YEARS ON FORM I OF EACH OF 10 TESTS\*

Test	General Factor $B_0$	Group I Factor $B_1$	Group II Factor $B_2$	Group III Factor $B_3$	Doublet $D_1$	Unique $U_1$
1	.613					.790
2	.724					.690
3	.506					.863
4	.544					.839
5	.646					.764
6	.688					.726
7	.620			.651		.438
8	.650			.606		.459
9	.651			.681		.335
10	.684			.414		.601
Contribution of Factor	4.041			1.425		4.534

\*  $\sigma_a = .088$

READ HORIZONTALLY: For Test 7 the general factor coefficient is .620, the group factor coefficient, .651, and the coefficient of the unique factor .438.

READ VERTICALLY: The coefficient of the general factor for Test 1 is .613; for Test 2, .724, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

form the groups would not be significant if they appeared alone (18, pp. 135-136). Whether "to factor or not to factor" is a decision that must often be made arbitrarily by the person making the analysis. Such decisions have been made by the present investigator in the six solutions presented.

The intercorrelations of the scores of each age group on Form I, Form II, and the Combined Form are given in Tables 11, 13, 15, 17, 19, and 21. The factor patterns derived from each of these tables follows immediately after it and these are numbered Tables 12, 14, 16, 18, 20, and 22, respectively.

#### A. SUMMARY OF THE SIX BI-FACTOR SOLUTIONS

The factor patterns derived from the six correlation tables showed two types of changes. First, there was a change in the number and kinds of factors which emerged. Second, there was a change in the relative size of the contributions of the general factor, of the group factors, and of their sum, the communality, to the variance of the tests.



TABLE 13  
INTERCORRELATIONS OF SCORES OF BOYS AGED 9 YEARS ON FORM II OF EACH OF 10 TESTS

Test	1	2	3	4	5	6	7	8	9	10
1										
2	.374									
3	.239	.291								
4	.265	.453	.024							
5	.286	.529	.186	.397						
6	.229	.388	.019	.450	.515					
7	.125	.238	.244	.263	.445	.215				
8	.238	.379	.237	.310	.401	.380	.634			
9	.256	.526	.102	.272	.505	.312	.530	.625		
10	.423	.531	.092	.375	.560	.365	.435	.554	.681	

READ: For each test read along the row to the diagonal and then down in the column carrying the test number. For instance the correlation between Test 4 and each of the remaining tests from 1 to 10 respectively is read .265, .453, .024, .397, .450, etc.

## NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 14  
BI-FACTOR PATTERN OF SCORES OF BOYS AGED 9 YEARS ON FORM II OF EACH OF 10 TESTS\*

Test	General Factor $B_0$	Group I Factor $B_1$	Group II Factor $B_2$	Group III Factor $B_3$	Doublet $D_1$	Unique $U_1$
1	.430	.251				.867
2	.722	.254				.644
3	.176	.646				.742
4	.517					.856
5	.751					.660
6	.488					.872
7	.485			.474		.734
8	.626			.524		.578
9	.636			.675		.374
10	.756			.222		.616
Contribution of Factor	3.410			1.004		5.040

\*  $d_a = .113$

READ HORIZONTALLY: For Test 7 the general coefficient is .485, the group factor coefficient, .474, and the coefficient of the unique factor is .734.

READ VERTICALLY: The coefficient of the general factor for Test 1 is .430; for Test 2, .722, etc.

## NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 15  
INTERCORRELATIONS OF SCORES OF BOYS AGED 9 YEARS ON THE COMBINED FORM OF EACH  
OF 10 TESTS

Test	1	2	3	4	5	6	7	8	9	10
1										
2	.524									
3	.341	.570								
4	.376	.494	.318							
5	.352	.545	.386	.433						
6	.428	.469	.301	.555	.558					
7	.311	.436	.245	.334	.552	.421				
8	.368	.502	.359	.336	.552	.444	.837			
9	.402	.570	.339	.343	.561	.459	.844	.844		
10	.572	.628	.390	.350	.605	.428	.698	.738	.770	

READ: For each test read along the row to the diagonal and then down in the column carrying the test number. For instance, the correlation between Test 4 and each of the remaining tests from 1 to 10 respectively is read .376, .494, .318, .433, .555, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

Table 23 shows all of the factor patterns which emerged in this experiment. Form I was factorially simple since at both age levels only the general factor and one group factor were required to describe its communality. Form II was more complex. At nine years of age the general factor and two group factors plus a doublet were required. At both age levels the Combined Form necessitated the use of the general factor and one group factor plus a doublet to describe its communality.

It will be noted that on the 12-year-level this doublet appeared in the group where a factor had emerged on Form II for 9-year-olds, and that on the 9-year-level it appeared in the group where a factor had emerged on Form II for the 12-year-olds. The appearance of a factor in one case and a doublet in the other was due mathematically to fluctuations in the relative sizes of group residuals. Whether these fluctuations were due to chance or whether they had psychological significance can be ascertained only by further research.

The communalities of the forms for both age groups and the contributions of the general and group factors to the variance of each are shown in Table 24. The inclusion of the large doublet in the communality of the Combined Form for 12-year-olds makes the quantitative interpretation of this

TABLE 16  
BI-FACTOR PATTERN OF SCORES OF BOYS AGED 9 YEARS ON COMBINED FORM OF EACH  
OF 10 TESTS\*

Test	General Factor $B_0$	Group I Factor $B_1$	Group II Factor $B_2$	Group III Factor $B_3$	Doublet** $D_1$	Unique $U_1$
1	.596					.803
2	.792					.611
3	.499					.867
4	.562				.324	.827
5	.754					.657
6	.640				.324	.768
7	.596			.685		.421
8	.668			.622		.409
9	.698			.626		.348
10	.774			.356		.523
Contribution of Factor	.4411			1.376	.210	.4213

\*  $\sigma_a = .079$

\*\* This doublet was established at a low confidence level and is not included in further analyses.

READ HORIZONTALLY: For Test 7 the general factor coefficient is .596, the group factor coefficient, .685, and the coefficient of the unique factor, .421.

READ VERTICALLY: The coefficient of the general factor for Test 1 is .596; for Test 2, .792, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

battery both difficult and uncertain. Therefore, the Combined Form for both nine and 12-year-old boys was not subjected to further analysis.

The data in Table 24 may be examined to determine what changes in the contributions of the general and of the sums of the group factors occurred with change in age. There were changes between the age of nine and 12 years in each of the two forms. In Form I the general factor increased 0.484 or approximately 11.2 per cent and in Form II, the general factor increased 0.533 or 15.6 per cent. The sums of the group factors decreased with age in both forms. In Form I the decrease amounted to 0.785 or 55.1 per cent. In Form II the decrease was 0.356 or approximately 23 per cent. The communality, which is the sum of the general and group factors, showed a small decrease with age in Form I and a small increase with age in Form II. The

TABLE 17  
INTERCORRELATIONS OF SCORES OF BOYS AGED 12 YEARS ON FORM I OF EACH OF 10 TESTS

Test	1	2	3	4	5	6	7	8	9	10
1										
2	.494									
3	.302	.400								
4	.486	.467	.263							
5	.405	.310	.236	.470						
6	.410	.427	.203	.392	.369					
7	.456	.500	.347	.506	.508	.250				
8	.535	.514	.411	.561	.450	.314	.719			
9	.527	.480	.313	.522	.442	.257	.744	.699		
10	.643	.491	.384	.554	.523	.426	.658	.725	.670	

READ: For each test read along the row to the diagonal and then down in the column carrying the test number. For instance, the correlation between Test 4 and each of the remaining tests from 1 to 10 respectively is read .486, .467, .263, .470, .392, .369, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

decrease amounted to 0.301 or 5.5 per cent in Form I and the increase to 0.1777 or 3.4 per cent in Form II. In these analyses, the content of the tests was the same for each age group, but both age and relative difficulty were permitted to vary. It is, however, the method used in all factor studies reported in this study, and the results are not in conformity with those to be expected by the proposed differentiation hypothesis.

The design of this experiment permits us to study the shifts in the contributions of general and of the sums of the group factors under conditions in which age is permitted to vary but in which differences in relative difficulty is minimized, and in which the content for the two populations is similar, but not identical.

The effects of increasing age upon the factor patterns under those conditions can be shown by comparing the factor pattern of boys aged nine years on Form I with the pattern of boys aged 12 years on Form II. This comparison shows that under conditions of minimum difference in difficulty the contribution of the general factor to the variance of the tests was 0.098 less for the older than for the younger boys and, at the same time, the contribution of the sum of the group factors was 0.231 less for the older boys. Using the contribution of the general factor at age nine as the base,

TABLE 18  
BI-FACTOR PATTERN OF SCORES OF BOYS AGED 12 YEARS ON FORM I OF EACH OF 10 TESTS\*

Test	General Factor $B_0$	Group I Factor $B_1$	Group II Factor $B_2$	Group III Factor $B_3$	Doublet $D_1$	Unique $U_1$
1	.727					.689
2	.671					.742
3	.439					.899
4	.682					.731
5	.571					.820
6	.481					.876
7	.717			.431		.549
8	.777			.389		.495
9	.709			.480		.517
10	.844			.270		.465
Contribution of Factor	4.525			0.640		4.835

\*  $a = .082$

READ HORIZONTALLY: For Test 7 the general factor coefficient is .717, the group factor is .431, and the coefficient of the unique factor is .549.

READ VERTICALLY: The coefficients of the general factor for Test 1 is .727; for Test 2, .671, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

we may note that the decrease of 0.098 amounted to 2.4 per cent. Using the contribution of the sum of the group factors at age nine as the base, we note that the decrease of 0.231 amounted to 16.2 per cent. It should be recalled that the contents of the two forms were similar, but not identical. It should also be emphasized that there is no known test for the significance of these differences, even if the content were identical.

These results suggest that age alone may make little difference in the size of the general factor. It may influence the group factors to a greater extent.

The data in Table 24 may be examined to determine the effect of differences in test difficulty upon the factor patterns. This can be shown by comparing the patterns of each age group on each of the two forms. Based upon the contribution of the general factor in Form I at the respective age level as the unit of measure, the general factor for boys aged nine years decreased 15.6 per cent with the increase in difficulty between Form I and Form II,

TABLE 19  
INTERCORRELATIONS OF SCORES OF BOYS AGED 12 YEARS ON FORM II OF EACH OF 10 TESTS

Test	1	2	3	4	5	6	7	8	9	10
1										
2	.528									
3	.288	.514								
4	.438	.527	.284							
5	.331	.271	.096	.467						
6	.371	.450	.255	.422	.357					
7	.330	.386	.249	.303	.181	.234				
8	.394	.428	.177	.446	.385	.304	.461			
9	.442	.516	.401	.510	.383	.375	.550	.511		
10	.526	.622	.420	.503	.433	.363	.554	.555	.623	

READ: For each test read along the row to the diagonal and then down in the column carrying the test number. For instance, the correlation between Test 4 and each of the remaining tests from 1 to 10 respectively is read .438, .527, .284, .467, .422, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

and the general factor for boys aged 12 years decreased 12.9 per cent under the same conditions. Based upon the contribution of the sum of the group factors in Form I at the respective age level as the unit of measure, the contribution of the group factors for boys aged nine years increased 8.8 per cent and the contribution of the group factors for boys aged 12 years increased 87 per cent under the same conditions. Again it should be pointed out that a portion of the differences noted may be due to the fact that the two forms were similar in content but were not identical. They certainly differed in difficulty.

When age is permitted to vary and the extremes of relative difficulty are analyzed, the trends noted above are even more pronounced. The greatest differences in relative difficulty are those between the 12-year-olds on Form I and 9-year-olds on Form II. Using the contribution of the general factor at age 12 years on Form I as a unit of measure, we may see that the increase in relative difficulty was accompanied by a decrease of 24.6 per cent in the contribution of the general factor. Using the contribution of the sum of the group factors to the variance of the same tests at age 12 years as a unit of measure, we note that the increase in difficulty was accompanied by an increase of 142 per cent in the contribution of the group factors.

TABLE 20  
BI-FACTOR PATTERN OF SCORES OF BOYS AGED 12 YEARS ON FORM II OF EACH OF 10 TESTS\*

Test	General Factor $B_0$	Group I Factor $B_1$	Group II Factor $B_2$	Group III Factor $B_3$	Doublet $D_1$	Unique $U_1$
1	.661					.751
2	.742					.670
3	.423					.906
4	.671		.302			.677
5	.444		.559			.700
6	.530		.218			.820
7	.479			.803	.214**	.355
8	.612			.209		.762
9	.755			.234		.612
10	.821				.214**	.571
Contribution of Factor	3.943		.451	.743	.092	4.863

\*  $a = .095$

\*\* Due to its size, this doublet is not included in the communality reported for these tests.

READ HORIZONTALLY: For Test 7 the general factor coefficient is .479, the group factor coefficient is .803, and the coefficient of the unique factor is .355. The doublet of .214 is not included in the communality.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 21  
INTERCORRELATIONS OF SCORES OF BOYS AGED 12 YEARS ON COMBINED FORM OF EACH OF 10 TESTS

Test	1	2	3	4	5	6	7	8	9	10
1										
2	.570									
3	.319	.759								
4	.514	.557	.325							
5	.406	.347	.193	.508						
6	.427	.470	.282	.460	.412					
7	.452	.505	.352	.466	.430	.284				
8	.533	.548	.367	.573	.461	.352	.713			
9	.539	.569	.393	.559	.472	.374	.720	.677		
10	.670	.609	.465	.571	.529	.445	.683	.727	.699	

READ: For each test read along the row to the diagonal and then down in the column carrying the test number. For instance, the correlation between Test 4 and each of the remaining tests from 1 to 10 respectively is read .514, .557, .325, .508, .460, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 22  
BI-FACTOR PATTERN OF SCORES OF BOYS AGED 12 YEARS ON COMBINED FORM OF EACH  
OF 10 TESTS\*

Test	General Factor $B_0$	Group I Factor $B_1$	Group II Factor $B_2$	Group III Factor $B_3$	Doublet $D_1$	Unique $U_1$
1	.730					.684
2	.743				.550**	.382
3	.478				.550**	.685
4	.710		.282			.645
5	.546		.424			.722
6	.535		.282			.796
7	.662			.690		.292
8	.755			.309		.579
9	.774			.301		.557
10	.875					.485
Contribution of Factor	4.775		.340	.662	.605	3.638

\*  $\sigma^2 = .074$

\*\* This doublet is included in the communality reported for these tests.

READ HORIZONTALLY: For Test 7 the general factor coefficient is .662, the group factor coefficient, .690, and the coefficient of the unique factor .292.

READ VERTICALLY: The coefficient of the general factor for Test 1 is .730; for Test 2, .743, etc.

#### NAMES OF TESTS

- |                          |                          |
|--------------------------|--------------------------|
| 1. Finding Middle Number | 6. Boys and Girls        |
| 2. Number Series         | 7. Vocabulary            |
| 3. Number Patterns       | 8. Opposites             |
| 4. Figure Exercises      | 9. Word Grouping         |
| 5. Figure Dividing       | 10. Arithmetic Reasoning |

TABLE 23  
SUMMARY OF FACTOR PATTERNS DERIVED FROM THE SIX CORRELATION TABLES OF THIS  
EXPERIMENT

Age	Form	General	Group I	Group II	Group III
9	I	X			X
12	I	X			X
9	II	X	X		X
12	II	X		X	X, D*
9	C	X		D*	X
12	C	X	D**		X

\* This doublet was established at a low confidence level and was not included in further analyses.

\*\* This doublet was established at a high confidence level and was included in further analyses.

READ: For subjects aged nine years, Form I showed a general and a Group III factor. . . . For subjects aged 12 years, Form II showed a general factor, a Group II factor, and a factor plus a doublet in Group III.



These results suggest that increasing the relative difficulty of tests tends to decrease the contribution of the general factor to the variance of the tests and, at the same time, to increase the contribution of the group factors.

TABLE 24  
CONTRIBUTIONS TO THE TEST VARIANCES OF THE GENERAL FACTORS, OF THE SUMS OF  
THE GROUP FACTORS AND OF THE COMMUNALITIES FOR BOYS AGED 9 YEARS  
AND FOR BOYS AGED 12 YEARS ON EACH FORM

Age	Form	Contribution to Test Variance		
		General Factor	Sums of Group Factors	Communality
9	I	4.041	1.425	5.466
12	I	4.525	.640	5.165
9	II	3.410	1.550	4.960
12	II	3.943	1.194	5.137*
9	C	4.411	1.376	5.787*
12	C	4.775	1.607	6.382**

\* Doublet excluded from the communality.

\*\* Doublet included in the communality.

READ HORIZONTALLY: For subjects aged nine years on Form I the general factor contributed 4.041, the sum of the group factors contributed 1.425, and the total of the two, the communality, contributed 5.466 to the variances of the tests.

READ VERTICALLY: For subjects aged nine years on Form I the general factor contributed 4.041; for subjects aged 12 years on Form I the general factor contributed 4.525 to the variance of the tests; etc.



## V. INTERPRETATIONS AND CONCLUSIONS

### A. THE FIRST HYPOTHESIS

In this chapter we are primarily concerned with the interpretation of these data in relation to the hypotheses stated in Section I. It will be recalled that the first hypothesis, that proposed by Professor Garrett, was: "Abstract or symbol intelligence changes in its organization as age increases from a fairly unified and general ability to a loosely organized group of abilities or factors" (12, p. 373). By this hypothesis, as the age of the subjects increased the general factor should have contributed less to the variance of the tests. Between the ages of nine and 12 years in both Form I and Form II there was, on the contrary, an increase in the contribution of the general factor. By the same hypothesis, there should have been an increase with increase in age in the contribution of the group factors to the variance of the tests. In this study there was a decrease with increase in age in the contribution of such factors. Furthermore, an increase in the specificity of the tests and an accompanying decrease in their communalities would have supported this hypothesis. The communalities, however, remained relatively stable, those in Form I showing slight decrease with age and those in Form II showing slight increase with age. It is apparent that those data do not support the hypothesis stated above.

If these data are confirmed by other studies it would appear that the first hypothesis will need to be re-examined.

### B. THE SECOND HYPOTHESIS

The second hypothesis, that proposed by the investigator, was: The observed differences between the factor patterns for two age groups are due not only to the age differences of the groups in question but also to differences in difficulty levels of the test materials for the two populations. Since the design of this experiment did not make it possible to hold both difficulty and content constant and to permit age, alone, to vary, we are unable to state that age, alone, did or did not affect the observed shifts in the factor patterns. When the difference in relative difficulty was minimized, the general factor was quite stable, showing a decrease of only 2.4 per cent between the ages of nine and 12, but the sums of the contributions of group factors showed a decrease of 16.2 per cent. It may be that group factors are more sensitive to changes that occur with normal increase in age than is the general factor.

There is strong evidence to support the hypothesis that the observed differ-

ences between the factor patterns for two age groups are due in part to differences in the relative difficulty of the materials. The analysis in the concluding section of Chapter IV showed that every time a test situation became relatively easier there was an increase in the contribution of the general factor and a decrease in the contribution of the sum of the group factors. It is certain that consistent changes in the factor patterns derived from those data accompanied known changes in the difficulty levels of these materials for the subjects of this experiment.

### C. IMPLICATIONS FOR FURTHER RESEARCH

Since these data do not conform with the data obtained by other investigators, the scores of the girls who took these tests should be analyzed to determine whether sex differences may have been the disturbing influence.

The influences that control the communality of tests should also be subjected to further study. In this study the communalities obtained showed small and contradictory changes with age. The communality of the easier form was somewhat greater for subjects of both ages than was the communality of the more difficult form. In this study, the communalities were relatively stable, being influenced very little by either changes in age or in the relative difficulty of the test materials. These data are too meager to warrant sweeping generalizations, however.

The influence of age and of test difficulty upon the size and the number of the group factors is also noteworthy. In every case the contribution of the group factors was greater at the age of nine years than at the age of 12 years. The contribution of the group factors was greater in Form II than in Form I at each age level. There were also more group factors in Form II than in Form I at each age level. It thus appears that relative immaturity on the part of the subjects and greater difficulty on the part of the materials may call into play quite highly specialized abilities which, among more mature subjects and with easier materials, become a part of the general competence. This may result in part from physiological maturation and in part from a longer common school training and the increase in experience which normally accompanies an increase in age in a typical American community.

Closely related to the appearance or disappearance of group factors is the change in the specific tests which make up the group in which the factors do appear. Other investigators have found that tests commonly shift from one group to another depending upon the characteristics of the population tested (3). It would be extremely difficult to determine with any degree of certainty when such changes are part of a directed process and when they are the

results of chance. However these shifts within the common factor space indicate that the factor pattern is not a static structure. The study of the dynamics of the factor pattern thereby becomes an important problem for further research.

In conclusion it should be stated that by using different methods of factor analysis of data such as these and by comparing the results obtained, one might contribute to the understanding of the changes which occur in the factor pattern with changes in age and in test difficulty.



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## A PROJECTIVE EXPERIMENT USING INCOMPLETE STORIES WITH MULTIPLE-CHOICE ENDINGS\*<sup>1</sup>

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## I. THE PROBLEM

This report describes an exploratory experiment with the incomplete story as a projective technique for the study of children. In the search for improved methods of personality study increasing emphasis has been placed by psychologists on the projective approach. The essence of the projective method is the presentation of stimuli which elicits from each individual his own pattern of interpretation.

Among the stimuli which have been widely used for projective purposes are ink blots, indistinct sounds which subjects may perceive as words, and pictures about which subjects are asked to tell stories.

If subjects are presented with ink blots and asked what shapes they see in them, the responses will have great variety. If subjects are given pictures, as in the Thematic Apperception Test, and asked to make up stories about the people in the pictures, the plots will vary in length and complexity, and the characters will differ in their motives, feelings, and actions. Among the problems in the interpretation of such projective protocols has been the separation of the elements or themes that mirror the subject's own overt experience and the life he sees around him from those that represent projections in the original Freudian sense (10) and from fantasy produced by the subject as a means of vicarious satisfaction.

One of the purposes of this experiment was to throw additional light on these forces which may enter into projection. If two groups of subjects differ in respect to an area of life experience, will their projections which deal with this area of experience differ, and, if so, in what direction?

A principal difficulty in attacking this problem is the variety and complexity of the productions obtained from the Thematic Apperception Test or other relatively unstructured projective stimuli. If we select two groups of subjects, for example, on the basis of whether they have or have not been guilty of truancy and give them the Thematic Apperception Test, we will obtain a great variety of themes. Only a small proportion of these may be related obviously and directly to the subject's attitude toward his school. While this variety of response may be one of the unique values to be obtained from certain projective stimuli as many writers in the field have pointed out, it has led to serious research difficulties. One form of attack is the use of stimuli possessing greater structuralization which Klopfer and Kelley (16, pp. 13, 14) have defined as "the degree to which the material has some objective meaning which it tends to impose upon the subject."

The story is one of the more structuralized approaches which has received

relatively little attention.<sup>2</sup> The subject may be asked to make up a story on a given theme, to reproduce a story previously heard, or to complete a story either by making up an ending or by making a selection from a number of choices presented to him. Despert and Potter (8) employed the first two methods with a group of children under psychiatric treatment. Anthony (3) used the incomplete stories developed by Thomas (37) with British children and studied the death themes in the protocols. Roody (26), employing stories with multiple-choice endings, found no significant difference in the "realism" of the endings chosen by well-adjusted and poorly-adjusted pupils. Zucker (41) used delinquent and non-delinquent boys as subjects and found significant differences between the two groups in the endings which they supplied to stories describing parent-child situations. The incomplete story as a research method has the advantage that it may deal with a particular phase of the lives of the subjects. If subjects are systematically selected who differ in this same phase of life experience, then the analysis of their projections might throw additional light on projective processes.

Children were chosen as subjects of this investigation because the investigator's interest and training was in education and child psychology. In considering the life area which would serve as a basis for grouping or differentiating the subjects, it seemed most desirable to select one which was common to all or nearly all children and considerably charged with feeling. Such an emotionally charged area is less approachable by direct inquiry and, hence, it is an area in which projective techniques are more likely to be required. Around it the individual builds psychological defenses which will alter his interpretation of the external world and his responses in projective situations.

The area of parent-child relationships seemed to meet all the requirements which had been set by the experimenter. Nearly all children have had relations with a parent or parent surrogate. The relationship is charged with feeling. It begins early in life and generally extends throughout childhood. It is of central interest in itself to clinicians who work with children.

The parent-child relationship is exceedingly complex. Writers in the field (2, 13, 17, 22, 34, 38, 40) speak of such variables as acceptance-rejection, consistent discipline-inconsistent discipline, domination-leniency and the like. Acceptance-rejection is one of the factors in the parent-child relationship which has received wide attention. The traumata produced by parental rejection are considered by most writers to be deep-seated and severe. The acceptance-rejection variable was accordingly chosen as the basis for the setting up of experimental groups. The selection had the additional practical

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<sup>2</sup>For reference dealing with the use of the story consult 3, 8, 15, 25, 26, 36, 37.

advantage that severe rejection is more likely to come to the attention of schools and social agencies than some other factors in the parent-child relationship and therefore suitable subjects could be more easily located.

The central problem of the research then became the selection of two groups which differed as groups in respect to their experience of parental acceptance or rejection. These two groups were to receive incomplete stories dealing with parent-child situations. The stories were to be so planned that the subjects in ending the stories could have the parent display variations in the amount of acceptance or rejection. It would then be necessary to determine whether the two groups differed in their projections and whether any difference, if there was one, would be in the direction of the subjects' life experience.

Many other factors would undoubtedly influence the projections. Clustered around the central problem, therefore, were the subsidiary problems of determining whether there were relationships between the projections and such factors as the age, intelligence, sex, and personality of the subjects.

Without reviewing the literature, it may be stated as a generally accepted principle that the rejected child responds to his rejection in various ways, such as by aggression, submissiveness, projection of his repressed hostility on others, withdrawal, etc. As in most experiments, the investigator began with hypotheses derived from consideration of general theories on personality formation and projection, personal experience in clinical work, and preliminary trials of projective materials with small numbers of subjects. The hypotheses, in brief, were these: (*a*) If a group of rejected children are presented with incomplete stories for which they must choose the "most likely" ending describing a parental response, they will tend to select endings describing more rejecting parental behavior than would a control group of children representative of the general population. (*b*) If some of the rejected children tended toward the choice of endings describing accepting parental behavior, these children would be shy, withdrawn, and given to daydreaming because their defense against rejection was the substitution of pleasant fantasy and this tendency in the projective situation would cause them to select "loving parent" endings. (*c*) Control group children would show a relation between the choice of endings describing accepting child behavior and good personality adjustment. Of the more poorly adjusted children, the shy and withdrawn would have a stronger tendency toward the choice of accepting parent endings than would the children characterized by aggressive behavior because the aggressive children have met their rejection by open resistance.

The experimenter realized that in all cases complex forces would be at work, but it was felt that an experiment of this kind would determine whether there was a general tendency for projection to work in the indicated directions.

In brief, it was felt that such an experiment might throw light on projective processes generally, give more information about a projective technique which had been subjected to relatively little experimentation and possibly lay the groundwork for the eventual development of a clinically useful instrument.

This was the background of the study and the general considerations which led to the setting up of the experiment. The next section will more precisely define the methods, materials, and terms employed in the investigation.

## II. DEVELOPMENT OF THE PROJECTIVE MATERIALS AND SELECTION AND CHARACTERISTICS OF THE EXPERIMENTAL GROUPS

Since the proposed incomplete stories were to have endings in which parents would be described as behaving in a manner indicative of various degrees of rejection or acceptance, the first step in planning the stories was a study of the literature on parent-child relationships to determine the meaning commonly attached to these terms and to gather samples or descriptions of parental behavior which might be placed on an acceptance-rejection continuum. After making this survey, the experimenter concluded that accepting behavior would be defined for the purpose of this experiment as behavior indicative of parental (a) satisfaction with the child's characteristics, (b) positive, pleasure-giving feelings arising from the parent-child relationship, (c) nurturant, protective feelings toward the child. Rejection was defined as the opposite of these characteristics. A long list of behavioral descriptions and adjectives was condensed into Table A.

TABLE A

Rejection Indicators	Acceptance Indicators
1. Threatens or promises punishment.	1. Gives praise to child, attributes favorable qualities to him, proud of child.
2. Indifferent to child's health and welfare.	2. Helps the child in satisfying his wants either directly or by making suggestions.
3. Scolds, attributes unfavorable qualities to child, expects the worst from him.	3. Seeks to protect child's health and look after his welfare.
4. Does not give child help in meeting his problems.	4. Gives consideration to child's desires and opinions.
5. Does not show interest in child's achievements.	5. Has empathy with child, understands him.
6. Lack of empathy with child, "can't understand him."	6. Interested in child's achievements.
7. In case of conflict, parent's wishes, opinions, etc., take precedence over child's.	

Stories were then invented describing mother-child situations in which the mother might show either rejecting or accepting behavior or some blend of the two. Mothers only were used so as not to introduce another element of variation into the stories. Furthermore, it was planned to use in the rejected group only children who had known a mother relationship.

Another set of stories was developed in which the endings would describe a child's reaction to a situation. These stories were designed to call forth the kinds of reactions which writers in the field felt were associated with



rejection such as aggression directed outward, guilt feelings, and egocentricity. It was planned to determine whether children choosing passive, withdrawing endings to these stories would have a tendency to choose accepting endings to the mother-reaction stories and whether children choosing aggressive endings would have the opposite tendency and also whether there would be a demonstrable relationship between the responses and other variables such as age, sex, intelligence, and personality characteristics. Both kinds of stories, without endings, were then given to 40 sixth and seventh graders. The children were told to read each story and write what they thought the parent or child would do or say under the circumstances.

The results were studied and a number of stories were discarded because they seemed to call forth essentially the same response from all or nearly all the children. Two revised forms were next prepared and given to 55 children. The author went through the responses and constructed three endings for each story, one typical of the more rejecting free responses, one representing the more neutral responses, and one the more accepting responses. It was often possible to incorporate the phraseology commonly used by the children. In all cases the endings constructed were samples of free-response types actually written by this preliminary Experimental group. There were in all 20 stories calling for reactions of the mother and 10 calling for child reactions. These stories were then divided into two sets. The mother-reaction stories were so divided that various types of parental reaction such as threats of punishment, giving of praise, and interest in the child's achievement would be represented in each set. The results from the preliminary trial also showed variations in the proportions of accepting, neutral, and rejecting responses given to the stories individually. This factor was also taken into consideration in dividing the stories into two sets. The sets (hereafter designated F1 and F2) were planned for use in a study of the consistency of the subjects' responses.

The two forms are given in the Appendix, but their arrangement there does not indicate the actual format of the material as it was presented to the children. In the original forms, each story was followed by a blank space for a "free response" ending while the multiple-choice ending to the story appeared on the following page. Section III describes the use made of this arrangement.

#### A. PUPIL BEHAVIOR RATING SCALES

The hypothesis that rejected children might tend to differ from others according to certain personality characteristics has already been stated. The

traits associated by writers with rejection on the basis of experimentation and experience consisted generally of observable behavior. Much of the work in the field had depended on ratings or less formalized observation. It was therefore planned to have ratings of the subjects made by teachers who were familiar with them. In an exploratory study of this kind with a relatively untried technique, this seemed more desirable than some more elaborate approach such as ratings by classmates, multiple ratings by several adult observers, etc.

It was felt that the traits selected for ratings should meet these qualifications: (*a*) be characteristics of rejected children as reported in the literature, (*b*) be traits which would influence projections under the planned experimental conditions according to the experimental hypothesis, (*c*) be observable by teachers, (*d*) be scalable.

Six scales were developed. These appear in the Appendix. It was felt that a five-point scale was as fine a discrimination as teachers would willingly make and that finer classification of the particular traits selected would be impracticable. A reading of the scales will show that the teacher was encouraged to compare each pupil with other class members.

The traits included were not conceived as independent but as various aspects of interrelated traits most readily observable by teachers.

### B. SELECTION OF THE EXPERIMENTAL GROUPS

The central problem having been set as a comparison of a group of rejected children with a group of other children differing as a group in respect to the kind of parent-child relationships they had experienced, the question arose as to how the experimental groups should be selected. The group with which the rejected group was to be compared might be made up of children who were accepted by their parents. Their parental relationship would be characterized by love, regard for physical welfare, respect for the child's personality and the like. There seemed no manner of assembling a group of this kind, however, with the means available. Teachers would have to depend upon such clues as cleanliness or chance statements made by the children. Friends of parents who might be asked to give an opinion might either be prejudiced or might lack real knowledge of the home situation. Furthermore, it seemed desirable to have normative data which would give some idea of the kinds of responses to be expected from the general population of the ages and grades under consideration. Therefore, it was decided to draw a sample representative of sixth and seventh grade students in Elizabeth, N. J., and to compare the responses of this sample with those

of the rejected group. These two groups are hereafter designated the Control and the Reject group.

Since it was most feasible to give the stories to groups of children at a time, schools were selected whose populations would be samples of the different socio-economic levels of the city. In the elementary schools and in some of the junior high school homerooms the children are heterogeneously grouped. Where homogeneous grouping was used in junior high schools, samples were drawn from upper, middle, and low groups. When the sampling was completed, it was found that the test had been administered to 140 boys and 143 girls. To facilitate computations and comparisons, the records of the girls were thoroughly shuffled and three removed by chance so that the number of the boys and girls was even. A total of 144 pupils, 65 boys and 79 girls, were in the sixth grade while 136 pupils, 75 boys and 61 girls, were in the seventh grade.

Later in the year, after the experimental tests had been given, the scheduled group intelligence tests were administered to all sixth grade pupils in the city. The results give some indication of the representativeness in respect to intelligence of that portion of the Control group which consisted of sixth graders. These data are presented in Table 1. A chi-square test

TABLE 1  
DISTRIBUTION OF IQ'S DERIVED FROM THE PINTNER GENERAL ABILITY TEST, VERBAL SERIES, FOR THE CONTROL GROUP BY SEX, CONTROL GROUP SIXTH GRADERS AND ALL ELIZADETH PUBLIC SCHOOL SIXTH GRADERS

IQ	Control Group Boys	Control Group Girls	Total Control Group	%	Control Group Sixth Graders		All Sixth Graders	
	N	N	N		N	%	N	%
120 and above	9	8	17	6	7	5	69	9
110 to 119	31	25	56	20	23	16	124	16
90 to 109	81	86	167	60	88	61	358	45
80 to 89	15	15	30	11	18	12	140	18
79 and below	4	6	10	4	8	6	98	12
Totals:	140	140	280	101	144	100	789	100

indicated that there was less than one chance in a hundred of getting such a difference between Control group sixth graders and all sixth graders through the operation of random sampling. The Control group sixth graders must be considered a sample representative of the whole group in central tendency but biased in the direction of mediocrity. The Control group contained more average pupils (IQ's 90 to 109) and fewer markedly inferior and markedly superior pupils than the population from which it was drawn.

Such direct comparison cannot be made for the portion of the Control group made up of seventh grade pupils since intelligence tests are not administered to all seventh graders and the pupils enrolled in the seventh grade are not identical with those enrolled the previous year in the sixth grade, due partly to random changes caused by removals and new entrants and partly by the tendency for considerable numbers of parochial school students to enter public schools at the beginning of the seventh grade. If it could be assumed that these shifts were random ones in respect to the intelligence of the pupils involved, then it could be concluded that the portion of seventh grade students in the Control group differed from the entire seventh grade group in possessing a higher proportion of mediocre and superior pupils and smaller proportions of very superior, inferior, and very inferior pupils. The factor of intelligence was the most important one in testing the randomness of the sample because of the variations in intelligence level from school to school. The socio-economic composition of the Control group is described in Section III.

Because comparisons will be made later between the responses of boys and girls in the Control group, the distribution of *IQ*'s for the two sexes separately is presented in Table 1. The mean *IQ* for the boys was 102.86 and for the girls, 101.79. The standard deviations were respectively 11.94 and 11.96. The small difference between the means is not statistically significant.

For the purposes of this study it was decided to seek cases for the Reject group in which the rejection was as overt and unequivocal as possible. These cases would be easier to locate because they are more likely to come to the attention of social agencies than are cases in which the rejection is indicated only by the mother's subtle innuendos as she speaks to the child or by those overprotective activities which appear to the lay public as the apex of parental solicitude. Furthermore, the findings of the study would be less subject to question on the grounds that the rejection of the subjects was not established.

It is recognized that there is a difference between the everyday parent-child situations which make up the bulk of most of the stories and the instances of parental behavior which appear in the case records. These records describe such things as desertion, ejecting the child from the house, going away and leaving him unsupervised for long periods of time and the like. They do not describe the words and tone used by the parent at the meal table or at bedtime. An investigation of everyday home behavior would require some means of maintaining undercover surveillance of the

home. We may therefore be forced to use an assumption which, reasonable though it may appear, must be recognized for what it is. This assumption is that parents who display the overt and severe rejection described in this report will, by and large, show more of the previously listed rejection indicators which appear in the stories than do the general run of parents. This supposition would be needed if it is found that rejected children choose more rejecting endings and if we interpret such a finding as indicative of projection which directly reflects experience. If the principle is accepted that human behavior has considerable consistency, the assumption seems justified.

When the experimenter started on this project after several years of case work experience which included close coöperation with a wide variety of social agencies, he conceived that it would be rather easy to locate 50 rejected children of the appropriate age. Social workers agreed with him but, after calling to mind a few outstanding and current cases, they found it difficult to add cases which had the necessary qualifications. At considerable expenditure of time, they were kind enough to check their files seeking subjects. About three thousand active and inactive cases from the author's case files were individually read. Those that offered any clues indicative of rejection were checked with the social agency central index. If the family was registered, the records of the agencies interested were examined. In this way 50 cases were obtained. They seem to represent a very large proportion of the overtly rejected children of appropriate age known to social agencies as residing in the city where this study was conducted. Therefore, the sample seems to comprise a very large proportion of the population from which it is drawn.

In the examination of case records, the following grounds for classifying the child as rejected were used: (a) child removed from the custody of the parents by court order because of lack of care, cruelty, and other indications of improper guardianship; (b) failure to provide support when it was within the means of the parent to do so; (c) desertion; (d) neglect of proper care; (e) parent states child is unwanted; (f) parent ejects child from home or states that they do not wish to keep child; (g) parent relinquishes guardianship or custody either voluntarily or under pressure from a social agency when in the opinion of the social agency, grounds for court action against the parent were available. Each of these cases was read by two professionally-trained social workers and only cases which they agreed showed rejection were included. The number of instances of these grounds appearing in the 50 cases is shown in Table 2.

TABLE 2  
EVIDENCES OF REJECTION OCCURRING AMONG THE CHILDREN OF THE REJECT GROUP

Evidence	Shown to		Total	Shown by	
	Boys	Girls		Fathers	Mothers
Non-Support	18	13	31	28	7
Desertion	10	4	14	6	8
Neglect	22	19	41	22	27
Parent states child unwanted, evicts child, seeks to get rid of child	20	8	28	13	19
Cruelty	6	5	11	11	—
Child removed by court	11	6	17	—	—
Guardianship relinquished by parent under pressure	6	4	10	—	—

Another factor given consideration in the selection of the rejected group was the recency of the rejection experience. It seemed likely that children who had been placed in good foster homes and who had made emotional transference to the foster parent might tend to react to the storied situations according to their most recent experience. On the other hand, institutionalized children who had never made a transference to foster parents might be expected to react to the parent-child situations in the light of their own parental relationships. Preference was therefore given to children who resided either with their own parents or with parent surrogates who were rejecting, or to institutionalized children who had maintained a relation with their parents. Thirty-two of the Reject group were still residing with their own parents. One lived with a foster mother who had adopted him at birth and who was rejecting. One had resided with a rejecting grandmother from infancy. One had been boarded by his mother in a private home for a year and a half. Neither the child nor the mother regarded this as a foster home. In fact, the child regarded the placement as indicative of the mother's rejection of him. One had been residing with an aunt for two years and seeing her mother and father at intervals. Fourteen of the children were in an institution where parents could visit weekly and where the child could visit his own home in most instances. Four of these children were in their fifth year in the institution; three in their fourth year; two in their third year; and one in his second year. Four had been in the institution less than a year.

Without reading the complete case histories, it is difficult to gain a picture of the atmosphere in which these children were reared. The following brief summaries were prepared from the full case records because no enumeration could give the impression to be gained from the social his-

tories. Emphasis has been placed on those details which indicated that the child could be classified as rejected as rejection is defined in this study. The individual records were selected by taking every fifth case when the cases were divided by sex and arranged in alphabetical order.

*Case 1: Anna T.*

Anna is the third of four children born to a common-law relationship. Mrs. T. had two children previously born in wedlock. After being deserted by her husband, she went to live with Mr. T. This relationship, which lasted 15 years, was terminated when the Domestic Relations Court ordered Mr. and Mrs. T. to live apart because of their continual physical brawls and obscene recriminations in which the whole family would become involved. Mrs. T. then went to work and the children, previously considered neglected by social agencies, were left entirely without supervision.

A family case work agency persuaded the mother to relinquish custody of the three youngest children. Because they were still emotionally attached to the mother, they were placed in a child-caring institution rather than in foster homes. Both parents were to contribute to the support of the children. They neglected to make their payments. Each maintained that the other should bear a larger share of the cost. Finally it was necessary to place them under court order to pay.

At this time, the oldest daughter born to Mr. and Mrs. T., who remained with her mother, complained that her mother frequently ejected her from the house because she was not earning. Investigation showed that when this girl obtained work, the mother would call the employer and ask for her discharge because the girl was epileptic. This girl would take shelter with an older half sister, Mrs. D., who was the child of Mrs. T.'s legal marriage. To the social worker Mrs. D. described her own childhood as "terrible." Childhood friends were never allowed in the house. All the housework was done by the children.

All during this time, Anna and her brothers and sisters in the institution made regular visits home to which they were still emotionally attached. A few months before Anna was used in this experiment, Mrs. T. left a note for the children saying that she no longer desired to see them. Anna went through a period of depression after this. Shortly before she responded to the stories, she told the director of the institution that she had come to realize what her mother really was and she no longer wanted to have anything to do with her.

The classification of rejection was based on neglect of the physical care

and training of Anna, the necessity of placing the parents under a court order to pay for her support, and the refusal of the mother to see Anna and the other children or to have anything to do with them.

*Case 6: Bernice M.*

Bernice is the fifth of six children of Greek parentage. During her childhood, her parents alternated between living together and apart. Mr. M. accused his wife and oldest daughter of being promiscuous. He claimed that his wife would not go to the town where his work made it necessary for him to reside. Mrs. M. claimed that her husband had a violent temper, that she lived in fear of him and that he sometimes threatened her with a knife.

Bernice was cared for in a day nursery between the ages of four and seven. Mrs. M. was to pay 10 cents a day for her care but it was difficult to collect even this from her, although the day nursery directors found she was able to pay. Much of the time Bernice had pediculosis which Mrs. M. did nothing to eradicate. During this period, the day nursery reports described Bernice as having a pale expressionless face, being very rough in her play, and given to swearing and the discussion of sexual matters. The director of the nursery wrote another social agency that it was her considered opinion that Mrs. M. was an improper guardian. In the strife between Mr. and Mrs. M., some of the children sided with the father and went to live with him, and some with the mother. In 1943 another child was born to Mrs. M. Mr. M. denied paternity, claiming that the real father was the husband of Mr. and Mrs. M.'s oldest daughter. Mrs. M. said that she did not want the child. She refused to remove it from the hospital. A social agency took the child and placed it for adoption after the agency brought court action against Mr. and Mrs. M. and convicted them of being improper guardians. Mr. M.'s record showed that he had had complaints of disorderly conduct and assault and battery lodged against him at various times. These complaints were dropped, but in 1942 he was convicted of atrocious assault and placed on probation for two years.

One of the older daughters ran away from home at 16 and did not communicate with her parents for three years. She accused her father of trying to force her into marriage with an older man. One of the sons left home at 15 and joined the Merchant Marine by falsifying his age.

Classification of rejection is based on the failure of the parents to provide a proper home, evidence of physical neglect, failure to pay for her care when it was within their means to do so, and a court conviction of being improper guardians.



*Case 11: Connie V.*

Connie is the second of four children born to Mr. and Mrs. V. who were living as man and wife, although Mr. V. had an earlier marriage which had never been legally dissolved.

Mr. V. had served in the Army during the first World War. He spent some time in a military hospital with a diagnosis of shell shock. For several years prior to 1947 his mental condition seemed to show progressive deterioration. Veterans groups had tried to obtain assistance for him through the Veterans Administration but these efforts always broke down because of Mr. V.'s refusal to go to a hospital or submit to a medical examination. Although he claimed that doctors were in league with the undertakers and no one was allowed to leave a hospital alive, he frequently sought help from local hospital clinics because of a variety of vague complaints which the clinic records indicated were mostly psychosomatic. Because of his distrust of doctors, he refused to have any medical care for his children. At the time of this study, Mr. V. had been unemployed for 10 years. Frequently he threatened that he would desert his family if conditions grew worse, but, at other times, he threatened to commit suicide if separated from them.

Mrs. V. is thus described in a social agency summary:

She is exceedingly dull, cannot follow directions, and is easily confused. Moreover, when crossed, she becomes angry quickly and is sometimes abusive to the children. By and large, their meals consist of sweet rolls and coffee or cold cereal. She is both dirty and lazy and unable to plan adequate meals for the children. We have had numerous complaints from every neighborhood in which the V.'s have lived because of their poor housekeeping standards and the dirt and filth in which they live. . . .

Custody of the children was finally taken by the State after court action. Prior to this, a social agency had gained the consent of the parents to place the children in an institution located only a few blocks from the V. home. Connie was placed there ahead of the other children and she manifested her resentment by "ugly" behavior which was modified when her brothers and sister joined her. Mr. and Mrs. V. sometimes came on visiting days but the children appeared apathetic toward the parents. By the time Connie took part in the experiment, all the children had made a reasonably good adjustment to the institution.

Rejection is indicated by the failure of the parents to provide properly or to give care, frequent abuse of the children by the mother, and the necessity of removing them from the custody of their parents. This failure and the

lack of emotional bond between parents and children was probably due to the low mentality of the mother and the mental deterioration of the father.

*Case 16: Dorothy F.*

Dorothy's mother died of tuberculosis when Dorothy was two. Little is known about her treatment prior to that time: From her mother's death until Dorothy was six, she lived with her alcoholic and promiscuous father in a series of disreputable rooming houses. She was then taken in by her grandmother, who had a tubercular history, after a social agency had pointed out to the grandmother that the child was living under improper conditions. A grandfather and an aunt with her infant child were also in the household. This aunt was separated from her husband. Six years after this placement, the grandmother was called to school because Dorothy had been late 19 times within six months. The grandmother complained that Dorothy was unclean, disobedient, and a thief. All the adult members of the family were employed. Because Dorothy had taken money from the house to buy candy when she came home from school to lunch, the grandmother kept the house locked and Dorothy was forced to eat her lunch on the back porch. The school principal referred the grandmother to the school psychologist. The grandmother came to the psychologist's office with Dorothy's aunt. Both had a long list of complaints about Dorothy. The aunt said that either she or Dorothy would have to get out of the house. During the conversation she revealed that she had been recently hospitalized for a "nervous breakdown" which followed an alcoholic period. The psychologist concluded from the statements given that Dorothy was severely rejected; the rejection had included severe punishment for minor misconduct and constant threats to "send her away." He referred the case to a family case work agency whose worker concurred in his opinion. Dorothy was immediately removed and placed in an institution.

*Case 21: Ethel S.*

Ethel is a highly intelligent girl of 14 who is now residing with an aunt. She was previously removed from the custody of her parents by court order which resulted from a complaint brought by a family case work agency.

Ethel's father claims to have run away from home at 11. He says that his surname is unknown to him. He can only remember that he was called "Tom." He has always worked on merchant vessels, seldom returning home more than three or four times a year. Mrs. S. was a nurse prior to her marriage. She claims that her marriage proved unhappy because Mr. S.

never made an effort to establish a home. He was satisfied to have her live in furnished rooms which he visited at rare intervals.

Ethel, the only child of this marriage, first came to the attention of a social agency through the complaints of neighbors that she was being neglected. Investigation showed that Mrs. S. was a confirmed alcoholic who was intoxicated almost continually. Ethel was then seven, and, according to Mrs. S.'s own family, Mrs. S. had been drinking heavily for about two years. Protracted efforts to stop Mrs. S.'s drinking were without effect, and finally, after three court hearings, Ethel was placed under the guardianship of a child protective agency. These hearings established that although the father knew of the conditions under which his child was living, he had remained indifferent.

Ethel seems to accept no one emotionally. She is very withdrawn and has had episodes during which she has refused to go to school. She would prefer to remain in her room and have a home instruction teacher come to the house. When her father makes his infrequent visits, her first move is always to demand an expensive gift such as a bicycle or fur coat. She manipulates her aunt by using temper tantrums.

#### *Case 26: Fred Y.*

Fred is a very dull boy who appears apathetic unless frustrated when he becomes excited and vindictive.

His parents were married at the beginning of the depression. For years Mr. Y. was either on relief, on the W.P.A., or employed intermittently. The relief authorities felt that he was no shirker and worked to the best of his ability. During most of the depression years they resided with Mrs. Y.'s parents. Mrs. Y. herself seemed to suffer chronic ill health. Reports from physicians in the relief agency stated that Mrs. Y. had two nervous breakdowns during these years but no details were given. With improvement in economic conditions, Mr. Y. found steady shift work and Mrs. Y. worked at night for the telephone company.

This family first came to the attention of the school psychologist when a 13-year-old niece of Mr. Y. reported that she had been living with her uncle. This enabled the Y.'s to have someone to stay with their children when they were both employed on the night shift. The niece reported that her bed was in the dining room and Mrs. Y. had told her that they had saved enough money to buy dining room furniture so she would have to go.

Mrs. Y. was later referred to the psychologist because of Fred's school difficulties. In two different interviews she showed no interest in his prob-

lems, frequently interrupting the psychologist with admonitions to hurry as she had to be going elsewhere. Fred always showed signs of poor care. He was frequently whipped, particularly by his mother. When Fred was asked who would punish him if he were bad, he replied, "God." When asked how God would punish him, he answered, "By making your father and mother hit you."

*Case 31: George H.*

George is the youngest and brightest (*IQ* 87) of four children. Both parents, particularly the mother, are markedly dull. Social workers have described their home as one of the dirtiest in the city. One report states:

Mrs. H. does not have the mental capacity to care for children . . . she is indifferent to their needs and inconsistent in her discipline. . . . The children are permitted to roam the streets at will. When Mrs. H. is annoyed with the children, she strikes out; when amused, she giggles. At other times she is indifferent.

The school records show intermittent attendance due to exclusions for pediculosis or to the mother keeping the children home to run errands, tend the younger children, etc. In 1947 the judge of the Juvenile Court asked a family case work agency to supervise the home because of conditions there.

*Case 36: Harold M.*

Harold is the second of five children born to a father of Italian birth and a mother of American birth but Italian descent.

Mrs. M. is 10 years younger than her husband. Their married life is a long record of conflict. After their marriage, Mr. M. "took advantage of his wife's inexperience" and ran around with other women, according to his own statement. Later his wife obtained employment, became independent, and began to go out herself. Her husband heard rumors about her and began to beat her. A long period followed during which they dragged their troubles through the offices of lawyers, social agencies, and into court. Finally Mrs. M. deserted her husband and children. She was subsequently evicted from one flat because of the landlord who found that men were constantly visiting there and so much drinking, swearing, and noise went on that the neighbors complained. In the meantime, Mr. M. placed two of the children with his mother and two with his sisters. He resided with his mother but subsequently took up with another woman who became pregnant by him. His visits to his mother's house and to his children became infrequent. Mr. M.'s family complained about having to care for

his children and Mr. M. asked their mother to take them back. This she was unwilling to do because she claimed that she did not have room for them. She finally took Harold and his brother with the understanding that it would be temporary. At the time Harold took part in the experiment, neither Harold nor his siblings were living in homes where their presence was desired.

*Case 41: Irwin K.*

Irwin is the second of two children. His mother is a widow who has been employed since Irwin was four. Irwin was referred to the psychologist with this statement:

. . . his ratings are very low, both in his subjects and in citizenship, yet his information on general subjects is exceptional . . . is a constant discipline problem balking at passing with his class to gym, the auditorium, etc. . . . has been repeatedly truant.

Irwin was placed in a day nursery at four, and the records make frequent reference to the evidence of neglect which he then showed. When interviewed by the psychologist, Mrs. K. immediately took the lead before the psychologist could explain why she was asked to come. She stated that Irwin was a great problem to her, unlike his older brother who was of great assistance. She said she could do nothing with him and expressed the hope that the psychologist would be able to have him placed in a correctional institution or on a farm. She showed no affection and seemed disinterested in the discussion of any plan that did not call for Irwin's removal. In this experiment he was therefore classified as a rejected child.

*Case 46: James F.*

James' mother married at age 16. After having two children, she deserted her family. James was born three years later. His paternity was doubtful. Shortly after birth, he was placed in an institution where he remained until he was three. He was then transferred to another institution where he remained until he was 10. His mother visited him regularly and frequently promised to take him away to live with her. These promises were never kept and, as the years passed, he became very disturbed emotionally after her visits. In 1942 Mrs. F. came to New Jersey from the Middle West where she had previously lived. James and one of her older daughters came to live with her. Shortly afterward, this daughter ran away. James got in trouble for stealing bicycles in 1944 and was placed on probation. The probation officer encouraged James to join a scout group. One

night he stayed a little later to help the scoutmaster. When he arrived home, his mother struck him and would not admit him to the house. He was taken in by sympathetic neighbors who "found his clothes grimy and his underwear in shreds." They notified a child-protective agency the next day. At the office of the agency, Mrs. F. cried over Jimmy's lack of affection for her. When asked whether he would rather go back to his mother or to the Smiths who had sheltered him overnight, Jimmy instantly answered, "the Smiths." After investigation, a complaint was filed and the court removed custody from the mother and placed Jimmy in a child-caring agency. He seemed quite happy there except when his mother visited him when he "froze up." In 1944 his mother committed suicide. Two weeks later the report of the institution case worker stated:

Jimmy has made greater improvement during the last two weeks than at any time since he came here. He takes a responsible part in the group. He feels freer to make attachments than heretofore.



### III. COLLECTION AND ANALYSIS OF THE DATA FOR THE PARENTAL-RESPONSE STORIES

All the projective materials were presented to the subjects either by the author or by a visiting teacher under his supervision. The presentation was made to the Control group pupils by classes. After being introduced to the class, this statement was made to the children:

We are trying to develop a test to measure how well people understand human nature. As you get older, you learn what people are likely to do under certain circumstances. You know what words or actions are likely to make different people angry or pleased. This test is designed to measure how good you are in understanding human nature. Now open to the first page.

The person giving the test read the first story aloud while the children followed on their papers. The experimenter then said: "Now write in the blank space under the story what you think the average mother or most mothers would say." After the children had all done this, the experimenter said, "Now turn to the next page. At the top you will find three choices." The choices were read aloud and the tester said: "Now put an 'X' in front of the *one* ending which is most like what you wrote on the page before. If none of them seems at all like what you wrote, put an 'X' in front of the ending which is most nearly like what you think the average mother would say." When the children had done this, the experimenter said: "Now go through the rest of the test in exactly the same manner. Under each story write what you are asked to write, then turn the page and pick the ending nearest to what you have written. Later on you will come to some stories in which a boy or girl says or does something. They are answered in exactly the same manner. Now go ahead." When the children had completed the first form, they were given the second and told to proceed. Supervision was given throughout the test to see that the children wrote responses before turning to the endings. Perhaps a dozen children out of the 330 tested commented during the test, "What she would say would depend on what kind of mother she was." The experimenter would then say, "Write what you think the average mother would say or what most mothers would say."

Six of the children in the Reject group received the projective materials when the stories were given to their homeroom sections. The remainder of the rejected children received the projective material in the same manner except that they were given the test as one of a group of three chosen



from the same room. Usually the teacher asked for volunteers and since all the children universally volunteered, she was able to pick the rejected child as one of those to take part.

The plan of administration thus called for having the child write a "free response" to each story before he saw the multiple-choice endings to it. By having the child "commit himself" in advance, it was hoped to make his choice of a prepared ending nearer to his first spontaneous reaction.

#### A. CHARACTERISTICS OF THE EXPERIMENTAL GROUP

The differences between the Control and Reject groups in respect to certain important factors is shown in Table 3. The mean age of the Reject group exceeds that of the Control group by about one year. The Reject group is also somewhat more variable. The mental age of the Control group exceeds that of the Reject group by about four months. Whereas 50 per cent of the Control group are boys, the proportion in the Reject group is 58 per cent. The occupational level of the person principally responsible for the economic support of the family (in most cases the father) is generally higher for the Control group. These differences must be kept in mind when comparing the two groups.

The mental age for both groups was estimated as of the time they re-

TABLE 3  
CONTROL AND REJECT GROUPS COMPARED IN RESPECT TO CERTAIN BACKGROUND FACTORS

	Control Group	Reject Group
Chronological age, mean	145.26 months	157.36 months
Standard deviation	10.434 months	15.928 months
Mental age, mean	145.50 months	141.12 months
Standard deviation	16.680 months	21.984 months
Sex, number of boys	140	29
Sex, number of girls	140	21
U. S. Employment Service occupational classification of principal family earner	Per cent of occupationally classified group	Per cent of occupationally classified group
Professional, semi-professional and managerial	7 per cent	4 per cent
Sales and clerical	8 per cent	2 per cent
Service	11 per cent	4 per cent
Proprietors	4 per cent	6 per cent
Skilled	33 per cent	12 per cent
Semiskilled	13 per cent	34 per cent
Unskilled	10 per cent	24 per cent
Housewives, unemployed	14 per cent	14 per cent
	100	100

ceived the projective materials. For nearly all the Reject group the mental age was determined directly by the administration of the Revised Stanford-Binet Scale, Form *L*, within a half month of the time they took part in the experiment. For the remainder who had previously received the same scale, the computation was made by taking the chronological age as of the time they took the projective test and the *IQ* and determining the mental age from the Revised Stanford-Binet manual. Because many of the group were below grade in reading achievement, it was felt that the Revised Stanford-Binet scale would measure their intelligence more accurately than would a verbal group intelligence test. For the Control group the mental age was computed by using the chronological age as of the time they took part in the experiment and the mean of the *IQ*'s previously received from the city-wide testing program. The tests used in this program were the Pintner General Ability Tests, Verbal Series. In Elizabeth, city-wide intelligence tests are administered each year to fourth, sixth, and eighth graders. The city-wide mean *IQ*'s obtained on these group tests were 101.8 when the seventh graders in the Control group were in the sixth grade, and 97.4 when the sixth graders in the Control group were in the fourth grade. The corresponding standard deviations were 17.3 and 16.5. These may be compared with Stanford-Binet means of from 101.0 to 102.2 for the standardization groups ranging in age between 11 and 14 years. The standard deviations varied between 17.3 and 19.5 *IQ* points. When comparisons are made between the Control and Reject groups which take into account mental age, the different tests used for the determination of mental age in the two groups must be borne in mind.

Intergroup differences in the teacher ratings given on the six personality scales are presented in Table 4. When the differences in the distribution of ratings for the Control and Reject groups were tested by the chi-square statistic, the odds were strongly against the assumption that the ratings of the two groups represented random samples drawn from a single population of teacher ratings in five of the six scales. The two groups differ in variability. The Reject group contains fewer "average" children and more who deviate in both directions. The Self-Confidence scale is the only one in which the difference is not statistically significant.

Since families containing rejected children showing deviate behavior would have a greater probability of coming to social agency attention than such families where the rejected children did not display deviate behavior and since the Reject group membership was obtained by searching social agency records, the greater frequency of deviate-behavior children may be in part

TABLE 4  
COMPARISON OF FIVE-POINT SCALE TEACHER RATINGS FOR CONTROL AND REJECT GROUPS

Scale and description	Group	Rating										Total	%	X <sup>2</sup>	P*
		1	2	3	4	5	N	%	N	%	N	%			
A—Reserved in Expressing Emotion (1) to Uninhibited in Emotional Expression (5)	Con.	27	10	64	25	96	34	70	25	23	8	280	100	14.352 less than .01	
	Rej.	9	18	16	32	8	16	8	16	9	18	50	100		
B—Quarrelsome (1) to Peaceable (5)	Con.	8	3	38	14	97	35	75	27	62	22	280	101	13.508 less than .01	
	Rej.	7	14	6	12	21	42	6	12	10	20	50	100		
C—Self-Confident (1) Lacking in Self-Confidence (5)	Con.	33	12	49	17	126	45	56	20	16	6	280	100	3.876 .50 to .30	
	Rej.	6	12	6	12	18	36	14	28	6	12	50	100		
D—"Day-dreaming" (1) to "Objective" (5)	Con.	14	5	44	16	157	56	49	17	16	6	280	100	10.575 .05 to .02	
	Rej.	6	12	14	28	16	32	8	16	6	12	50	100		
E—Poorly Behaved in School (1) to Well-Behaved (5)	Con.	11	4	17	6	117	42	59	21	76	27	280	100	10.483 .05 to .02	
	Rej.	8	16	6	12	17	34	9	18	10	20	50	100		
F—Attention Seeking (1) to Shy (5)	Con.	17	6	51	18	127	45	70	25	15	5	280	99	11.308 .05 to .02	
	Rej.	10	20	8	16	14	28	14	28	4	8	50	100		

\*"P" indicates the probability that the differences between the ratings of the two groups could arise in samples drawn from populations homogeneous in respect to teacher ratings.

a reflection of the manner in which the Rejected group membership was located. There were also some differences in the circumstances under which the teacher ratings were made for the two groups. The Control group pupils were rated by homeroom classes. Six of the Rejected pupils were rated along with their homeroom groups. In these cases the teacher was unaware of the experimenter's interest in a particular child. The remainder of the Reject group children were rated individually by home teachers after the experimenter had explained that he was interested in the child because of his home background.

### B. SCORING OF PARENTAL-RESPONSE STORIES

The central purpose of the investigation was to determine the relationship between the endings chosen and experimental group membership, chronological age, mental age, sex, and the personality ratings made by teachers. In studying the effect of various factors on ending choices, each story could be considered individually or the story responses could be combined to make a score since each ending to the parental-response stories (stories in which the endings called for a parental response) could be characterized as "accepting," "neutral," or "rejecting" on the basis of judges' ratings. As previously described, the endings to the first 10 stories in each form were graduated by the experimenter to represent responses on an acceptance-rejection continuum. This judgment of the experimenter was checked by having the endings rated as being "accepting," "neutral," or "rejecting" by 10 judges who were professionally engaged as psychologists, visiting teachers, or family-case-work social workers. There was unanimous agreement in the classification of all the endings except for the tenth story in Form 1 where there was a disagreement on the "neutral" and "accepting" ratings. Consequently, this story was not used in the computation of scores. Ten judges were used because with 10 judges in agreement on a rating, there was but one chance in 1,056 that the population from which the judges were drawn would not show at least a majority of judges who would also be in agreement on the rating.

After the story endings had been rated by the judges, the responses of the 280 children in the Control group and the 50 in the experimental group were scored by assigning a score of "3" for accepting endings, "2" for neutral endings, and "1" for rejecting endings. This made possible on the 19 scored stories a score range of 19 to 57. These scores are hereafter referred to as "*A-R* scores."

## C. ITEM ANALYSIS AND RELIABILITY

After scoring, an item analysis was made to determine the degree of relationship between the choice of each story ending and *A-R* score. Biserial *r* was employed. The continuous variable was *A-R* score and the dichotomous variable the choice of a particular ending versus any other choice. If the responses on a particular story are consistent with the responses on all the other scored stories, then there should be a positive correlation between accepting responses on the particular story and the *A-R* scores and a negative correlation between the rejecting responses on the particular story and the *A-R* scores. The correlation between neutral re-

TABLE 5  
BISERIAL CORRELATIONS BETWEEN CHOICE OF PARTICULAR ENDINGS AS THE DICHOTOMOUS  
VARIABLES AND TOTAL ACCEPTANCE-REJECTION SCORES  
AS THE CONTINUOUS VARIABLES

Story Number	Designation Letter of Ending	Judges' Rating of Ending	<i>r</i> <sub>bis.</sub>
<i>Form I</i>			
1	A	Acc.	+.65
	B	Neu.	-.32
	C	Rej.	-.62
2	C	Acc.	+.47
	B	Neu.	+.01
	A	Rej.	-.52
3	B	Acc.	+.19
	A	Neu.	+.02
	C	Rej.	-.35
4	C	Acc.	+.54
	A	Neu.	+.09
	B	Rej.	-.60
5	A	Acc.	+.47
	B	Neu.	-.05
	C	Rej.	-.42
6	C	Acc.	+.40
	B	Neu.	+.09
	A	Rej.	-.55
7	A	Acc.	+.32
	C	Neu.	+.11
	B	Rej.	-.36
8	B	Acc.	+.40
	A	Neu.	-.29
	C	Rej.	-.40
9	A	Acc.	+.60
	C	Neu.	-.10
	B	Rej.	-.59

sponses on a particular story and the composite scores should show a correlation, either positive or negative, lying between the correlations obtained for the accepting and neutral endings since the score value given neutral responses lies midway between the values assigned to accepting and rejecting responses. Departure from zero in either a positive or negative direction would be indicative of the association of this particular item with composite scores which were above or below the mean of the total distribution.

The results of this item analysis are set forth in Table 5. It will be seen from an inspection of this table that the items are consistent throughout with the single exception of the accepting and neutral responses to Form 2, Story 4.

TABLE 5 (continued)

Story Number	Designation Letter of Ending	Judges' Rating of Ending	$r_{bls.}$
<i>Form 2</i>			
1	A	Acc.	+.35
	B	Neu.	-.17
	C	Rej.	-.65
2	B	Acc.	+.52
	A	Neu.	-.23
	C	Rej.	-.44
3	B	Acc.	+.22
	C	Neu.	-.09
	A	Rej.	-.29
4	A	Acc.	+.18
	B	Neu.	+.35
	C	Rej.	-.49
5	B	Acc.	+.29
	A	Rej.	-.29
6	C	Acc.	+.57
	A	Neu.	-.31
	B	Rej.	-.43
7	C	Acc.	+.38
	B	Neu.	+.10
	A	Rej.	-.47
8	A	Acc.	+.29
	B	Neu.	-.16
	C	Rej.	-.31
9	C	Acc.	+.19
	B	Neu.	-.05
	A	Rej.	-.24
10	C	Acc.	+.46
	A	Neu.	+.10
	B	Rej.	-.64

The reliability of the *A-R* scores was determined by finding the product moment coefficient of correlation between the scores on Form 1 and Form 2 for the 280 subjects in the Control group. This yielded an  $r$  of  $.51 \pm .03$ . This reliability is based on the comparison of two forms, one of which contains only 9 items and the other 10 items. Employing the Spearman-Brown formula for estimating the reliability of the whole test from two comparable halves of the test, the reliability of the whole 19 scored items would be  $.68 \pm .03$ .

#### D. GROUP MEMBERSHIP AND *A-R* SCORE

The relation between ending choices and other variables may be approached through the use of *A-R* scores or by consideration of group variations in the proportion of accepting, neutral and rejecting endings. Both these methods were employed. First consideration will be given to comparisons employing *A-R* scores. One of the central features of the study was the comparison of the Control and Reject group responses. Whether the comparison was made in terms of mean score or biserial correlation, the difference was very close to zero. The range of scores in the Control group was 28 to 55 and in the Reject group from 29 to 52. The mean scores were 41.25 for the Control group and 41.70 for the Reject group with standard deviations of 5.26 and 5.42 respectively. The difference between the means was not significant, the  $t$  value being .54 with 328 degrees of freedom. When point biserial correlation was computed between group membership and score, the correlation was .01 with a standard error of .05. Hence, in spite of the fact that the Reject group had suffered severe rejection, their choice of endings to the parental response stories, when measured in terms of score, was not significantly different from the responses of the Control group.

#### E. OCCUPATIONAL CLASSIFICATION AND *A-R* SCORES

Since it is widely accepted that social classes differ somewhat in their child-training practices, the question arose as to whether these differences have a measurable influence on responses to the incomplete stories. "Social class" is capable of many interpretations. A parental population may be classified according to intelligence, education, wealth, occupation, place of birth, religion, and the like. Information on most of these attributes was not available for the Control group. Occupational data, however, were available for most of the group. Occupation carries a heavy weight in the common concept of social class. Occupational level is related to education, wealth, and social competence. Therefore, it was desired to see whether there would

be any significant difference between the responses of the children whose parents were in different occupational levels. Although occupations may be classified in various ways, the most desirable for this study was one which would be most closely related to child training practices. It seemed that a classification based on the amount of skill, judgment, and training required would most suit the purpose. Classifying occupations in this manner is beset with difficulties because competence or skill may have so many different aspects.

While a number of occupational scales have been constructed, the most thorough attempt at occupational classification is probably represented by the *Dictionary of Occupational Titles* prepared by the United States Employment Service of the Department of Labor. The Dictionary contains 29,000 occupational titles, many of which represent name variants. Codification of these occupations is based on elaborate analyses of occupational duties, training requirements, etc., which have been carried on by the Employment Service for many years. All the categories in the classification system employed in the Dictionary do not represent steps in a skill-training continuum but the following are recognized as representing steps in such a continuum: (a) professional, semi-professional, and managerial occupations; (b) skilled occupations; (c) semiskilled occupations; (d) unskilled occupations. The other three categories into which some of the parents fell were clerical and kindred occupations, service occupations, and proprietary occupations. The service occupations are made up of four subclasses: domestic service occupations, personal service occupations, protective service occupations, and building service workers and porters. Because only 10 cases were in the proprietary classification and these ranged from contractors to push-cart owners, this group was not used for comparative purposes.

The parental occupations of 242 of the 280 children in the Control group were determined with sufficient accuracy to permit classification. In most instances the classification was based on the information obtained from the cumulative record. In a few instances supplementary questioning of the pupil was necessary.

Comparison between the responses of the children whose parents fell into various occupational categories was made by calculating the  $t$  value for the difference between the mean score of each occupational category and the mean score of each other occupational category using the formula for independent measures. When these computations were completed, it was found that none of the differences attained significance at the 5 per cent confidence level; i.e., any differences found might have arisen from the random sampling of a



TABLE 6  
*A-R* SCORES AND OCCUPATIONAL CLASSIFICATION OF PARENTS: CONTROL GROUP

Occupational classification	<i>N</i>	Mean score	$\sigma_m$	<i>SD</i>
Professional, Semiprofessional, and Managerial	21	41.381	1.004	4.603
Clerical & Sales	22	41.545	1.223	5.731
Service	31	40.903	1.246	6.939
Skilled	92	41.609	.505	4.848
Semiskilled	37	39.676	.936	5.695
Laborers	29	40.690	.707	3.806

single population of scores. Table 6 shows the means, standard deviations, and standard errors of the means for the various occupational groupings.

#### F. *A-R* SCORES AND OTHER VARIABLES

Correlation coefficients and ratios were computed between the scores of each experimental group and chronological age, mental age, and the six sets of personality ratings. Point biserial correlations between sex and score were also calculated. When the chi-square test for goodness of fit was made, the relationship between scores and five of the six personality variables was significantly nonlinear. The exception was Scale *A* (reserved vs. uninhibited in expressing emotion).

Correlations for linear relationships other than Scale *A* are presented in Table 7. While none of these correlations may be considered high, it

TABLE 7  
 COEFFICIENTS OF CORRELATION BETWEEN *A-R* SCORES AND OTHER VARIABLES WITHIN THE CONTROL AND REJECT GROUPS

	Control Group		Reject Group	
	Correlation with <i>A-R</i> Scores	St. Error	Correlation with <i>A-R</i> Scores	St. Error
Chronological Age	+.35*	.06	+.28*	.13
Mental Age	+.12	.07	+.39*	.12
Sex†	.17*	.07	.43*	.15

†Point biserial correlations, higher scores associated with girls.

\*Statistically significant at or beyond the five per cent confidence level.

must be remembered that they are influenced by the reliability of the test which in terms of *A-R* score is .68. Furthermore, since the pupils were drawn from only the sixth and seventh grades, the variability in maturity is correspondingly narrow. The control group standard deviation in chronological age is only a little more than 10 months and the standard deviation

for mental age was 17 months. For the Reject group the corresponding standard deviations were 16 and 22 months.

If the low but significant relationship between chronological age and *A-R* score is not accepted as reflecting a real relationship, then it will be necessary to attribute the relationship to a systematic sampling error as a result of which the older pupils would differ from the younger in some attribute other than age which would be related to *A-R* score. Pupils were drawn from two grades—the sixth and seventh. The residential areas from which the sixth grade elementary pupils were drawn lay within the districts from which the seventh grade junior high school pupils were drawn and seemed to be representative of those areas in economic status and national origin of the parents. Any slight variation would apparently not influence the results since it has already been demonstrated that there is no significant relationship between occupational status and score.

The low but significant biserial correlation between sex and *A-R* score is found in both the Control and Reject groups. In each group girls have the higher *A-R* scores.

More detailed analysis of responses presented later will throw light on the response characteristics which produced this maturity and sex difference in mean score.

The correlation ratios are presented in Table 8. Comparisons between the size of the correlation ratios for the Control and Reject groups are complicated by the differences in the two groups. The correlation ratio is

TABLE 8  
CORRELATION RATIOS BETWEEN *A-R* SCORES AND PERSONALITY RATINGS

	<i>n</i> <i>yx'</i>	<i>PE</i>	<i>n</i> <i>xy</i>	<i>PE</i>
<i>Control Group</i>				
Personality A	.044	.040	.345**	.035
B	.070	.040	.234**	.039
C	.183**	.039	.351**	.035
D	.049	.040	.251**	.038
E	.071	.040	.247**	.038
F	.087	.040	.340**	.036
<i>Reject Group</i>				
Personality A	.388 <sup>+</sup>	.081	.702**	.048
B	.286*	.087	.757**	.041
C	.323*	.085	.613**	.060
D	.329*	.085	.675**	.052
E	.202	.092	.661**	.054
F	.204	.091	.723**	.046

\*Significant at the 5 per cent level of confidence.

\*\*Significant at the 1 per cent level of confidence.

influenced by the numbers in each of the subclasses. With a constant number of subclasses, if everything else is equal, a smaller sample tends to give a larger correlation ratio. Since the Reject group was the smaller of the two, its correlation ratios tend to be inflated more by the factor of sample size. In Table 8 is presented the correlation ratios for the regression of  $x$  on  $y$  and  $y$  on  $x$ . In each case the  $y$  distribution consists of the  $A$ - $R$  scores. In the  $xy$  column all the correlation ratios are very significant (more than four times the probable error). Finally in Table 9 the significant  $xy$  ratios are corrected for both sample size and broad categories by using the procedure originally developed by Kelley and presented by Peters and Van Voorhis. There is a significant relationship between all

TABLE 9  
CORRELATION RATIOS CORRECTED FOR SAMPLE SIZE AND BROAD CATEGORIES ( $\epsilon$ ) BETWEEN  
 $A$ - $R$  SCORES AND OTHER VARIABLES FOR CONTROL AND REJECT GROUPS

	Control Group $\epsilon xy$	Reject Group $\epsilon xy$
Chronological Age	.35**	.62**
Mental Age	.19	.39
Personality A	.35**	.71**
B	.21**	.79**
C	.35**	.60**
D	.23**	.68**
E	.23**	.66**
F	.34**	.74**

\*\*Statistically significant at the one per cent level of confidence.

the tabled variables and  $A$ - $R$  scores within both groups with the exception of mental age where the ratio does not attain significance within either group. The higher correlation ratios for the Reject group are not surprising in view of the greater variability of that group.

These statistically significant correlation ratios demonstrate the presence but not the direction of the relationships between score and rating. Smoothed curves for mean personality score ratings show a "W" shaped curve predominating with higher scores associated with "average" ratings and lower scores associated with below average and above average ratings while the small number of extreme scores at each end of this distribution have again slightly higher ratings to make truncated upward-pointed tips on either end of the "W." Since this type of relationship is found in Scale  $d$  (Reserved to Uninhibited) and Scale  $F$  (Attention-Seeking to Shy), the hypothesis that the Reject children who were reserved and shy would tend to have higher  $A$ - $R$  scores because they would be replacing harsh reality with pleasant fantasy is not borne out. Higher scores tend to be associated with average

ratings in those scales where the extremes of the scale represent less desirable personality characteristics. The balance between the types of responses chosen by the experimental subgroups which produce these effects will be analyzed in the rest of the section.

A further difficulty in the use of *A-R* scores is that they do not distinguish between the separate contributions made by accepting, neutral, and rejecting responses. Two neutral responses make the same contribution to a score as one accepting and one rejecting response, although their psychological significance might be quite different.

To determine the separate contributions made by the three types of responses, each type was summed for each subject and the mean number of responses per subject computed for the various experimental classifications. The significance of the differences between the means was then tested by using the formula for uncorrelated groups and calculating *t* ratios. Tables 10 and 11 show the means and standard errors of the means for various categories of the Control and Reject groups. The chronological and mental age comparisons are made between split halves while the five-fold classification on the personality ratings are condensed to three-fold classifications to increase the numbers in each of the groups and the stability of the compared means.

The results of testing the differences between the means for significance are set forth in Tables 12 and 13.

Although the Control group was limited to pupils from but two grades, *the sixth and seventh, and the standard deviation of the group in chronological age was only 10 and one-half months*, there is a significant difference between the mean number of accepting responses when the older half of the group is compared with the younger half. The older half chose significantly more accepting responses and significantly fewer rejecting responses, but the frequency of neutral responses did not differ significantly between the two comparison groups. The correlation of higher chronological age with higher *A-R* score may therefore be attributed to the tendency of the older children to choose more accepting responses which carried a score of three and fewer rejecting responses which carried a score of one.

Because of the high relationship between chronological age and mental age, we would expect similarity in the findings for the mental age comparisons. Again there is a significant difference in the frequency of rejecting responses when the older half mentally are compared with the younger half. Rejecting responses are characteristic of the more mentally immature. The difference between the two halves in the number of accepting responses

TABLE 10  
MEAN NUMBER OF ACCEPTING, NEUTRAL, AND REJECTING RESPONSES MADE BY CONTROL  
GROUP CATEGORIES AND STANDARD ERRORS OF THE MEANS

Category	Accepting Responses		Neutral Responses		Rejecting Responses	
	Mean Number	Standard Error of Mean	Mean Number	Standard Error of Mean	Mean Number	Standard Error of Mean
Chron. Age						
Older Half	8.321	.281	6.907	.213	3.864	.248
Younger Half	7.079	.236	6.929	.160	4.929	.224
Mental Age						
Higher Half	7.914	.252	7.286	.192	3.814	.210
Lower Half	7.486	.263	6.550	.179	4.979	.235
Sex						
Boys	7.314	.230	6.836	.172	4.907	.221
Girls	8.086	.284	7.000	.203	3.886	.227
Scale A Rating						
Reserved	7.253	.322	7.044	.229	4.670	.287
Average	8.333	.320	6.656	.236	4.062	.266
Uninhibited	7.355	.296	7.075	.224	4.430	.272
Scale B Rating						
Quarrelsome	7.913	.479	6.543	.328	4.674	.356
Average	8.043	.303	6.649	.213	4.299	.288
Peaceable	7.380	.262	7.248	.190	4.372	.231
Scale C Rating						
Self-Confident	7.927	.335	6.939	.266	4.171	.269
Average	7.929	.278	6.905	.200	4.310	.252
Lacking in S.C.	7.042	.402	6.931	.235	4.986	.334
Scale D Rating						
Daydreaming	7.707	.380	6.382	.227	4.911	.353
Average	7.892	.249	6.752	.179	4.369	.218
"Objective"	7.246	.363	7.831	.289	4.000	.312
Scale E Rating						
Poorly-Behaved	8.178	.653	6.464	.402	4.536	.486
Average	7.829	.274	6.658	.196	4.513	.257
Well-Behaved	7.429	.266	7.244	.196	4.274	.215
Scale F Rating						
Attention-Seeking	7.838	.382	6.456	.286	4.794	.345
Average	7.961	.279	6.905	.178	4.134	.240
Shy	7.200	.309	7.318	.244	4.482	.274

is not statistically significant. There is a significant difference, however, in the proportion of neutral responses. The higher frequency was associated with higher mental age. It would appear, therefore, that maturity when measured either chronologically or mentally is associated with a lowered frequency of rejecting responses. The more mature tend to replace rejecting responses with neutral responses when the group is split on the basis of mental age and with accepting responses when the group is split on the basis of chronological age. In other words, the older pupils of higher IQ tend

TABLE 11  
MEAN NUMBER OF ACCEPTING, NEUTRAL, AND REJECTING RESPONSES MADE BY REJECT  
GROUP CATEGORIES AND STANDARD ERRORS OF THE MEANS

Category	Accepting Responses		Neutral Responses		Rejecting Responses	
	Mean	$\sigma_m$	Mean	$\sigma_m$	Mean	$\sigma_m$
Chron. Age						
Older Half	8.040	.512	8.160	.565	2.800	.490
Younger Half	7.240	.653	7.360	.459	5.120	.636
Mental Age						
Higher Half	8.040	.564	8.280	.589	2.680	.466
Lower Half	7.240	.615	6.520	.408	5.240	.638
Sex						
Boys	7.414	.569	7.069	.534	4.621	.521
Girls	8.333	.549	7.857	.505	3.048	.674
Scale A Rating						
Reserved	6.960	.663	8.200	.500	3.840	.713
Average	7.000	.568	7.750	.996	4.250	.862
Uninhibited	8.941	.692	6.059	.572	4.000	.634
Scale B Rating						
Quarrelsome	9.154	.704	6.000	.662	3.846	.904
Average	6.810	.578	7.619	.541	4.572	.627
Peaceable	7.500	.810	8.375	.728	3.250	.753
Scale C Rating						
Self-Confident	8.167	.753	7.083	.924	3.750	.906
Average	7.777	.616	7.833	.644	3.389	.589
Lacking in S.C.	7.200	.783	7.200	.493	3.367	.739
Scale D Rating						
Daydreaming	7.050	.665	7.650	.516	4.300	.778
Average	8.188	.697	8.000	.701	2.938	.675
"Objective"	7.857	.832	6.500	.727	5.643	.716
Scale E Rating						
Poorly-Behaved	8.429	.705	5.929	.654	4.750	.883
Average	7.000	.846	7.941	.542	4.059	.713
Well-Behaved	7.632	.696	8.053	.637	3.316	.662
Scale F Rating						
Attention-Seeking	8.389	.667	6.778	.701	3.833	.584
Average	8.071	.739	7.071	.584	3.857	.664
Sly	6.556	.699	8.278	.589	4.167	.924

toward more neutral responses while the older pupils of lower *IQ* tend toward more accepting responses.

Several hypotheses might be suggested to account for the trends above described. If it is accepted that there is not a sampling bias present and that the older pupils are not drawn from an essentially different population and the manner in which the sample was taken, the distribution of intelligence, and the social level of the parents show no significant difference between the older and younger pupils when the differentiation is based on attained grade, then there seems to be no substantial evidence for assuming

TABLE 12  
SIGNIFICANCE OF DIFFERENCES BETWEEN THE MEAN NUMBER OF ACCEPTING, NEUTRAL,  
AND REJECTING RESPONSES OF CONTROL GROUP CATEGORIES AS TESTED BY *t* RATIOS

Categories Compared	Accepting Responses		Neutral Responses		Rejecting Responses	
	<i>D.f.</i>	<i>t</i>	<i>D.f.</i>	<i>t</i>	<i>D.f.</i>	<i>t</i>
Older half, chronologically, younger half	278	3.384***	278	.082	278	3.179***
Higher half in mental age, lower half	278	1.160	278	2.798***	278	3.698***
Boys, girls	278	2.109**	278	.614	278	3.221***
<i>Scale A</i>						
Reser'd, average	186	2.379***	185	1.179	185	1.555
Reser'd, uninhib'd	180	.233	182	.097	182	.608
Average, uninhib'd	185	2.248*	187	1.285	187	.965
<i>Scale B</i>						
Quarr., average	141	.230	141	.271	141	.819
Quarr., peaceable	181	.976	181	1.855	181	.713
Average, peaceable	232	1.628	232	2.102*	232	.198
<i>Scale C</i>						
Self-con., average	206	.000	206	.102	206	.377
Self-con., lack S.C.	152	1.692	152	.023	152	1.900
Average, lack S.C.	196	1.814	196	.084	196	1.610
<i>Scale D</i>						
Daydr'ming, average	213	.407	213	1.345	213	1.351
Daydr'ming, object.	121	.878	121	3.981***	121	1.977
Average, objective	220	1.465	209	3.164***	220	.979
<i>Scale E</i>						
Poorly beh., average	143	.493	143	.434	143	.042
Poorly beh., well-beh.	161	1.020	161	1.747	172	.493
Average, well-beh'd.	250	.969	250	2.123*	261	.714
<i>Scale F</i>						
Att.-Seek'g, average	193	.260	193	1.328	193	1.568
Att.-Seek'g, shy	151	1.299	151	2.286*	151	.709
Average, shy	210	1.829	210	1.359	210	.953

\*Statistically significant at .05 level of confidence.

\*\*Statistically significant at .02 level of confidence.

\*\*\*Statistically significant at .01 level of confidence.

that the older pupils came from homes which were systematically different in their child training practices. It is possible that the older children were handled differently by their parents because of their greater attained age and this difference in handling is reflected in their responses. If such is the case, it would seem that there also should have been a significant difference between the Control and the Reject groups since the Reject group had been selected on the basis of the deviate behavior of the parents. It seems more likely to the experimenter that the more mature pupils were more sophisticated in this testing situation and that they had a greater tendency to select answers which depicted the mother replying in what they considered

TABLE 13  
SIGNIFICANCE OF DIFFERENCES BETWEEN THE MEAN NUMBER OF ACCEPTING, NEUTRAL,  
AND REJECTING RESPONSES OF REJECT GROUP CATEGORIES AS TESTED BY *t* RATIOS

Categories Compared	Accepting Responses		Neutral Responses		Rejecting Responses	
	<i>D.f.</i>	<i>t</i>	<i>D.f.</i>	<i>t</i>	<i>D.f.</i>	<i>t</i>
Older half, chronologically, younger half	48	.965	48	1.099	48	2.889***
Higher half in mental age, lower half	48	.959	48	2.458*	48	3.240***
Boys, girls	48	1.189	48	1.167	48	1.841
<i>Scale A</i>						
Reser'd, average	31	.046	31	.404	31	.367
Reser'd, uninhib'd	40	2.066*	40	2.817***	40	.168
Average, uninhib'd	23	2.166*	23	1.473	23	.191
<i>Scale B</i>						
Quarr., average	32	2.573***	32	1.800	32	.660
Quarr., peaceable	27	1.613	27	2.414*	27	.507
Average, peaceable	35	.693	35	.834	35	.741
<i>Scale C</i>						
Self-con., average	28	.401	28	.666	28	.334
Self-con., lack S.C.	30	.890	30	.112	30	.328
Average, lack S.C.	36	.579	36	.781	36	.023
<i>Scale D</i>						
Daydr'ming, average	34	1.182	34	.402	34	1.322
Daydr'ming, object.	32	.628	32	1.289	32	1.271
Average, objective	28	.853	28	1.485	28	2.749**
<i>Scale E</i>						
Poorly-beh., average	29	1.298	29	2.369*	29	.609
Poorly-beh., well-be.	31	.805	31	2.327*	31	1.300
Average, well-beh'd	34	.527	34	.134	34	.764
<i>Scale F</i>						
Att.-Seek'g, average	30	.320	30	.321	30	.027
Att.-Seek'g, shy	34	1.897	34	1.639	34	.324
Average, shy	30	1.490	30	1.456	30	.287

\*Statistically significant at .05 level of confidence.

\*\*Statistically significant at .02 level of confidence.

\*\*\*Statistically significant at .01 level of confidence.

a "nice" or polite manner. It may also be possible that some of the pupils felt that the test was designed to reveal conditions in their homes and that they covered up accordingly.

This explanation is somewhat strained, however, if it is used to account for the significant differences in the Control group between the responses of girls and those of boys unless it is agreed that girls, for some reason, display more test sophistication.

Only one set of Control group personality scale ratings showed significant differences in the mean number of accepting endings. Pupils rated "average"



on Scale *A* had a higher mean number of accepting responses than those rated above or below the average in tendency to express emotion. This group of "average" pupils contained 50 boys and 46 girls. Hence, the higher mean of the "average" raters cannot be attributed to a preponderance of girls in the group.

None of the other relationships between personality scale ratings and mean number of accepting responses attained statistical significance. The closest approaches were made by the higher means of the "average" pupils as compared with those lacking in self-confidence (Scale *C*) and between those rated "average" and those rated more shy than the average (Scale *F*). The lowest means were found among the intercorrelated traits of "reserve," "peaceableness," "lack of self-confidence," "shyness," and "good school behavior." Also characterized by low frequencies were the "objective" ratings on Scale *D*. It should be emphasized that the total number of responses made by each individual was fixed by the conditions of the experiment. Higher frequencies in one category must necessarily be accompanied by lower frequencies in the others.

As previously stated, those of higher mental age have a greater neutral response frequency. An examination of the neutral responses in the Appendix will show that they are generally *balanced*—admonition, advice, or the pointing out of failure being coupled with suggestion, expression of interest or approval, and nurturant feelings. A comparison of neutral response means which yields a significant difference is that between those rated "average" and "peaceable" on Scale *B*. The mean number of neutral responses is higher for those with a "peaceable" rating. A significantly higher mean for neutral responses is also a characteristic of pupils rated "objective" on Scale *D*, and the significance of the difference holds for comparisons between the "objective" and both those rated "average" and those rated "daydreaming." The *t* ratio between the "objective" and the "daydreamers" was the greatest of all those computed. In Scale *D* an effort was made to separate those whose attention seemed strongly fixed on the immediate environment (the "objective") from those given to inner thoughts. There was also a significant difference between the means for "well-behaved" as compared to average pupils on Scale *E* and "shy" as compared to "attention-seeking" pupils on Scale *F*. The higher frequency of neutral responses was a characteristic of the "well-behaved" and "shy" pupils. As shown in Table 14, "peaceableness" is associated with both "good school behavior" and shyness and all three of these traits are positively associated with neutral responses. An even stronger relationship with neutral responses is found

TABLE 14  
INTERCORRELATIONS BETWEEN PERSONALITY TRAIT RATINGS: CONTROL GROUP

Scale	A	B	C	D	E	F
A	—	-.526	-.584	.120	-.371	-.674
B	-.526	—	.169	.031	.701	.602
C	-.584	.169	—	-.254	.089	.532
D	.120	.031	-.254	—	.262	.000
E	-.371	.701	.089	.262	—	.483
F	-.674	.602	.532	.000	.483	—

on the objective-daydreaming continuum which has a low relationship with the other variables mentioned (Correlation of *D* with *B*, .03; with *E*, .26; and with *F*, .00). Neutral responses, in summary, seems associated with mental maturity and a group of characteristics in large part traditionally deemed desirable; that is, ability to concentrate on the task at hand, good school behavior, peaceableness. Also associated with neutral responses is shyness which studies have shown is a trait held in greater regard by many teachers than self-assertion and aggression.

Rejecting responses are chosen less frequently than the other two types of responses. A tendency toward the selection of rejecting responses is characteristic of younger pupils chronologically, those of lower mental age and boys. All these differences exceed the .01 level of confidence. None of the personality subgroup comparisons yielded statistically significant differences in rejecting response means although the *t* ratio for the difference between "daydreaming" and "objective" fails to attain the .05 level by a third-decimal-place difference. The higher frequency of rejecting responses was made by the "daydreamers." If we go down the list of personality attributes and select those which would generally be considered the most desirable, those attributes in each case are characterized by a lower frequency of rejecting responses though none of the differences is statistically significant. This is true of average pupils as compared with reserved or uninhibited, average as compared with very quarrelsome or peaceable, self-confident pupils as compared to all others, objective pupils as compared to all others, well-behaved as compared with others, and average as compared with either shy or attention-seeking ones.

#### G. RESPONSE-TYPE COMPARISONS BETWEEN THE CONTROL AND REJECT GROUPS

It has already been pointed out that there is no reliable difference between the experimental groups in their responses to the parent-reaction stories when those responses are in score form. The same holds true when the types of

response are considered separately. The  $t$  ratios for the difference between the experimental groups in mean number of accepting responses is .137; in mean number of neutral responses, 1.233; in mean number of rejecting responses, .942. With 328 degrees of freedom, all these fall short of statistical significance.

Although the overall patterning is the same, it may be asked whether the response trends within the Reject group are similar to those in the Control group. With some significant exceptions the trend is similar. In the Control group, the "average" on Scale  $A$  had a higher mean number of accepting responses than the "uninhibited." In the Reject group this was reversed. The  $t$  ratio testing the difference between the mean number of accepting responses made by the "uninhibited" Control group and the "uninhibited" Reject group children is 2.11. With 105 degrees of freedom this is significant at the 5 per cent level. When the Control group "objective" pupils on Scale  $D$  are compared with the Reject "objective" pupils, we find that the Reject group pupils have a higher mean number of rejecting responses. The  $t$  ratio testing the significance of the difference is 2.10 which is significant at the .05 level with 77 degrees of freedom.

The separate analysis of accepting, neutral, and rejecting responses again demonstrate the falsity of the hypothesis that the shy, reserved, or daydreaming children would have a tendency toward more accepting responses.

The two experimental groups do not differ in preference for the three ending types. However, the "uninhibited" rejected children have a stronger tendency toward accepting choices than comparable children in the Control group while the "objective" children who have been rejected choose rejecting endings with significantly higher frequency than do "objective" children in the Control group.

#### IV. ANALYSIS OF THE DATA OBTAINED FROM THE CHILD-REACTION STORIES

Each of the two series of stories included five stories in which the endings described responses which a child might make to situations as well as 10 stories with endings describing parental reactions to situations. The endings to these child-reaction stories were selected to include types of child behavior associated with parental rejection. These stories were included to determine whether there was a demonstrable relationship between the choice of certain child-reaction endings as "most likely" on the one hand and acceptance-rejection scores, personality ratings by teachers, sex and maturity on the other.

The endings to the child-reaction stories were not designed to fit a continuum as the mother-response story endings fitted an acceptance-rejection continuum. Some stories present ending choices in which the central child character shows outwardly-directed aggression by criticism of others and by demands that they comply with his wishes. In others, the central character feels hostile but does not overtly reveal it. Still others give an opportunity to display egocentric behavior. For convenience in following the discussion of this chapter a synopsis of the 10 child-reaction stories and endings is presented.

##### A. SYNOPSIS OF CHILD-RESPONSE STORIES

###### *Form 1*

*Story 11.* Although his book is still before him, a boy has just finished his homework and he is trying to decide whether to go next door and play or listen to the radio. His mother comes in limping and when the boy asks, she explains that she hurt her knee. She urges him to finish his homework and says she must go to the grocery.

- A. Child says his work is done and asks if he can go out and play.
- B. Boy urges his mother to rest and says that he will go to the store.
- C. Child asks if he can listen to the radio when his work is done.

*Story 12.* Having been promised a trip to the movies, a boy is playing in the dining room. He collides with his mother as she enters and breaks a platter. His mother says he cannot go to the movies and orders him to his room.

- A. As the child goes to his room, he wonders why he is always doing the wrong thing.
- B. The boy questions the punishment pointing out that the incident was an accident.
- C. The boy goes silently to his room, thinking he is being treated in a mean, unfair manner.

*Story 13.* A boy grabs another's hat. Turning to look back as he runs, he trips and falls. Other children laugh. When he gets home, his mother is in bed with a "strange pain" in her chest. He goes to his own room feeling blue.

*A.* He is worried about his mother.

*B.* He wished he had behaved and not grabbed the hat.

*C.* He thinks if he had not looked back, he would not have fallen.

*Story 14.* A boy is mopping the porch when his mother suddenly calls him in. His father does not see the mop pail and steps in it. He scolds the boy angrily.

*A.* The boy thinks it a good joke on the father because he should have looked where he was going.

*B.* The boy blamed his mother for calling him in.

*C.* The boy blamed himself for leaving the pail in the way.

*Story 15.* A boy tries to enter a ball game which has started. The pitcher tells him to run along.

*A.* He withdraws thinking the boys mean.

*B.* His feelings are hurt and he resolves that he will not play with those boys any more.

*C.* The boy demands a chance saying that he has a right to play.

### *Form 2*

*Story 11.* A boy is caught stealing candy and is taken by a policeman to his father who told him how bad it was to steal. The boy promised never to steal again. Later he has another opportunity to steal.

*A.* He steals.

*B.* He resists temptation.

*C.* He leaves the store to avoid temptation.

*Story 12.* A boy is caught throwing snowballs in the school yard. Two other boys who threw snowballs were not detected. The boy is taken to the principal who asks whether he has anything to say.

*A.* The boy did not want to tell on the others so he said he had nothing to say except that he was in the wrong.

*B.* He admitted throwing snowballs but promised he would never do it again if he were not punished.

*C.* He claimed he was only defending himself from two other boys.

*Story 13.* At a critical point in a football game, a team does not follow the advice of the star player and they fail to win. In the dressing room the star

*A.* Says that anyway they played a good game and he hopes for better luck next time.

*B.* Accuses his teammates of being "dumb" and says they should have listened to him.

*C.* Blames himself for not being quick enough in carrying through the play on which the team had decided.

*Story 14.* While going to school, a boy sees broken glass on the sidewalk. Another boy, who is frequently late, falls on the glass while hurrying to school and cuts his knee. When the first boy learned of this, he thought

*A.* It served the injured boy right for not starting to school on time.

*B.* That the accident was his own fault because he had not pushed the glass from the walk.

*C.* That whoever dropped the glass in the first place should have cleaned it up.

*Story 15.* A boy, sitting on his back porch, is sad because he has been told by his parents that he must get rid of his dog. His mother comes out of the house and says she is going across the street. The dog follows her around the house. In a moment the boy hears the screech of car brakes and a crash. He runs around the house and finds that

*A.* His mother has been hit by a car.

*B.* The dog was hit by a car.

*C.* The mother and dog were safe. Two cars had collided.

#### B. CHILD-REACTION RESPONSES AND *A-R* SCORES

The relation of child-reaction ending choice to *A-R* score was analyzed individually for each story by examining the significance of the difference between the *A-R* score means of those choosing each ending to each story. Since each story had three endings, three comparisons of means could be made for each story and 30 comparisons could be made for the whole 10 child-reaction stories. Of the 30 comparisons between mean *A-R* scores for different ending choices there were 13 differences which were statistically significant at or beyond the 5 per cent level of confidence. The results are tabularized in Table 15. It should be remembered that the comparisons made represent comparisons between groups differing in their choice of ending to a particular story and hence the stability is lost which would result from successive samples of reactions to similar stimuli.

Children who chose endings in which the central child character showed lack of concern for the parent's welfare or hostility toward the parent tended to have lower (more rejecting) *A-R* scores than children choosing endings showing the opposite kind of behavior. When the mother came in limping and announced that she was going to the store, the children who selected the ending in which the child offers to go to the store in the mother's place had higher *A-R* scores than those who made no offer to help and asked for per-

TABLE 15  
SIGNIFICANCE OF THE DIFFERENCES BETWEEN THE MEAN *A-R* SCORES OF CONTROL GROUP  
SUBJECTS CHOOSING VARIOUS ENDINGS TO THE CHILD-RESPONSE STORIES

Form (F) and Story (S) Number	Letter designation of ending chosen by end- ing-choice subgroup with higher mean <i>A-R</i> scores	Letter designation of ending chosen by end- ing-choice subgroup with lower mean <i>A-R</i> scores	<i>df</i>	<i>t</i>	Level of Significance
F1, S11	B	A	261	2.57	.05
F1, S13	A	C	134	2.24	.05
F1, S13	B	C	164	2.12	.05
F1, S14	C	A	209	2.33	.05
F1, S14	C	B	246	3.11	.01
F2, S11	B	A	222	3.66	.01
F2, S11	C	A	110	3.63	.01
F2, S12	A	C	195	4.46	.01
F2, S12	B	C	203	3.19	.01
F2, S13	A	B	220	3.57	.01
F2, S14	B	A	250	3.87	.01
F2, S15	C	A	122	2.52	.05
F2, S15	C	B	256	2.02	.05

mission to play. In F1, S13 where the child in the story may show concern either over his own troubles or over his mother's "strange pain," the children who selected the ending showing concern for the mother had higher *A-R* scores than those who selected the response which indicated a feeling of frustration because he had fallen while running with the hat. In the "mop-pail" story (F1, S14) the ending choices permit feelings of hostility to the father (It's a good joke on him) or to the mother (It's my mother's fault) or self-blame. Those choosing endings showing hostile feelings against either parent had lower *A-R* scores than those choosing the ending indicating self-blame. Finally, the last story in the second form permits the display of hostility through the choice of an ending in which the mother is hit by an automobile. Those choosing the ending in which the mother is hit by a car had significantly lower *A-R* scores than those choosing the ending in which both the mother and dog are safe.

Another thread running through several endings is the feeling of super-ego involvement as exemplified in regret over acts considered wrong, resistance to temptation, and self-blame. The groups choosing endings indicating superego involvement had higher mean *A-R* scores than those who did not choose such endings. The endings to F1, S13 were designed to appeal to three tendencies. One, already mentioned, was concern over the

mother's "strange pain." Another was indicative of superego involvement—"He wished that he had behaved himself." The third was designed to show merely regret over tripping without a feeling of remorse or concern over the mother's condition. The children choosing the ending showing regret over misbehavior as well as those showing concern for the mother had higher *A-R* scores than those choosing the egocentric third ending. Similarly in the "mop-pail" story those choosing the ending showing self-blame (Why was I so forgetful?) had a higher group mean *A-R* score than those who chose the endings in which hostility or blame was directed toward others. Superego involvement in a different setting appears in F2, S11 where the child in the story had an opportunity to repeat the offense of stealing candy. Those choosing the ending in which the central character remains on the scene and resists temptation as well as those choosing the ending in which the central character avoids theft by leaving the store had significantly higher mean *A-R* scores than those choosing the ending in which the central character again steals. A similar trend appears in the story of the child caught throwing snowballs. Choice of the ending in which the central character assumes responsibility (I was in the wrong) as well as choice of ending "B" in which guilt is admitted are associated with higher mean scores than choice of the third ending in which the central character tries to blame the other boys (I was only defending myself.) The situation and choices presented to the experimental subjects differed slightly in the football story (F2, S13) in that there is one choice possible which involves neither criticism of others nor of self. The central character takes a pollyanna view of the defeat and remarks "better luck next time." The mean *A-R* score of those choosing the pollyanna response (ending "A") was significantly higher than the mean of those choosing the ending in which the blame is cast upon teammates (ending "B"). The mean score of those choosing the "self-blame" ending lay between the mean of the other two endings. The situation in this story varied from the others in that the central character was actually not at fault and hence there were no grounds for self-blame. The mean *A-R* score of those choosing the ending in which blame is cast upon teammates was the lowest of the three ending groups.

The relation between the mother-reaction and child-reaction stories is in harmony with commonly held theories of the relation between parental practice and child personality. The child who sees the mother as accepting shows more concern with the parent's welfare, less hostility directed against the parent and stronger superego development. The child who sees the mother as rejecting shows less concern with the parent's welfare and more



egocentricity, more hostility against the parent, and a tendency toward weaker superego involvement and toward casting blame upon others.

The relation between ending choice and other factors, some of which represented categories or coarse groupings, was analyzed for each story individually by the use of the chi-square statistic. The results are displayed in Table 16. Since each ending carried its own psychological implication,

TABLE 16  
CHILD-RESPONSE STORY ENDINGS CHOSEN WITH SIGNIFICANTLY DIFFERING FREQUENCIES  
BY VARIOUS SUBCLASSES OF THE CONTROL GROUP\*

Control Group Subclass	Form (F) and Story (S) Number	Letter Designation of Story Ending	Significantly Overchosen (+) or Underchosen (—)	Chi-Square	P
Higher half in mental age	F1, S15	A	—	6.588	.02
	F1, S15	C	+	10.632	.01
	F2, S11	A	—	3.053	.01
	F2, S12	A	+	14.278	.01
	F2, S14	A	—	11.754	.01
	F2, S14	B	+	21.990	.01
	F2, S14	C	—	6.706	.01
	F2, S15	A	—	8.338	.01
Boys	F2, S13	C	+	5.566	.02
	F1, S12	B	+	8.286	.01
	F1, S15	A	—	6.588	.01
	F2, S11	B	+	4.820	.05
	F2, S13	A	—	5.234	.05
	F2, S13	B	+	10.488	.01
Scale A Uninhibited in emotional expression	F2, S13	C	—	4.103	.05
Scale B Peaceable	F2, S15	C	+	4.558	.05
Scale C Self-confident	F2, S13	A	+	3.988	.05
	F2, S13	C	—	7.663	.01
	F2, S14	C	—	4.035	.05
Scale C Average in self-confidence	F2, S13	A	—	4.369	.05
	F2, S13	C	+	5.476	.02

\*The first entry in the table is read as follows: the half of the Control group higher in mental age on Form 1, Story 15 chose ending A less frequently than the remainder of the Control group. The chi-square computed from a four-fold table in which the columns represent respectively the listed subclass and the remainder of the Control group and the rows represent respectively the choice of ending A and the choice of any other ending was 6.588. The probability (P) is .02 that the compared subclasses do not differ in their preference for ending A as compared to other endings.

TABLE 16 (*continued*)

Control Group Subclass	Form (F) and Story (S) Number	Letter Designation of Story Ending	Significantly Overchosen (+) or Underchosen (—)	Chi-Square	P
Scale C Lack of Self-Confidence	F1, S12	C	+	8.773	.01
	F1, S15	C	—	5.327	.05
	F2, S14	C	+	5.835	.02
Scale D Daydreamers	F1, S14	C	—	4.082	.05
Scale D Average	F1, S15	A	+	3.863	.05
Scale D Non-introspective	F2, S13	A	+	4.043	.05
Scale E Poorly behaved	F1, S15	A	—	8.854	.01
Scale E Average	F1, S15	A	+	4.505	.05
Scale E Well behaved	F2, S13	A	+	5.783	.02
Scale F Attention-seeking	F1, S15	A	—	4.863	.05
Scale F Average	F1, S13	A	+	7.614	.01
	F1, S13	C	—	8.313	.01
Scale F Shy	F1, S13	A	—	5.819	.02
	F1, S13	C	+	7.868	.01
	F1, S15	A	+	6.578	.02
	F1, S15	C	—	8.213	.01
	F2, S12	A	—	5.887	.05

it was desired to test whether or not any particular ending was chosen or avoided by the various experimental subclasses. The chi-squares were computed from four-fold tables in which the columns represented respectively the ending under consideration and the other two endings while the rows represented respectively either an experimental group subclass and the remainder of the experimental group or the Control group and the Reject group.

### C. RESPONSES OF CONTROL AND REJECT GROUPS TO CHILD-REACTION STORIES

The first set of computations testing whether the Control and Reject groups differed significantly in their ending choice to the child-response stories gave negative results. There was no significant difference between the two groups on any of the 10 stories.

Since the Control group represented more nearly a normal population and since it was much larger numerically, further tests of relationships were carried out with that group only.

To avoid unduly small numbers in the experimental subclasses the Control group was either divided into two groups of equal size as in the comparison of the older half with the younger half, half higher in mental age with half of lower mental age, and boys with girls; or, as in the case of the personality rating scales, the division was three-fold: above average, average, and below average.

While there were no statistically significant relationships between ending choice to the child-response stories and chronological age, five of the 10 stories had endings chosen with significantly differing frequencies when the Control group was split on the basis of mental age. Since the results shown in Table 16 were based on an even split of the group, what is shown there as characteristics of the higher mental age group is true to an equal degree but in the opposite direction for the lower mental age group. Most of the responses selected or avoided by the mentally more mature may be characterized as showing what may be interpreted as a feeling of social responsibility. This interpretation may be put on the avoidance of the ending where the child caught stealing once steals again, where the child blames himself for not picking up glass on which another child later falls, and by the assumption of responsibility and avoidance of "buck passing" or pleading when caught throwing snowballs. These responses taken together may be looked upon variously as indicating superego development or even a self-condemnatory trend. Story F1, S15 presents a slightly different situation. Faced with exclusion from a game, the mentally more mature have the central character demand a part in the game and avoid passive withdrawal. In the last story in Form 2 (F2, S15) the group of higher mental age choose a "happy ending" and avoid the ending where the mother is struck. This may indicate a lower level of hostility in the higher mental age group or a stronger tendency to repress it in the projective situation.

There were four stories in which boys and girls differed significantly in

ending choice. Three of these may be interpreted to indicate a tendency for boys to be more verbally aggressive than girls. Thus, boys more frequently have the central character "speak back" to the mother when punished, sharply criticize teammates who have not followed his advice, and avoid passive withdrawal when excluded from a game. The fourth story, dealing with the child who has stolen and is again tempted, indicates an overchoice by the boys of the ending in which the child resists temptation. The girls, who underchose this ending, tended to substitute either the ending in which the central character again succumbs or one in which the central character leaves the store to relieve the tension caused by temptation. While this is an interesting finding, not too much weight can be attached to it since other stories which tended to draw on superego involvement did not show a sex difference. With a large number of relationships to test and the acceptance of a one chance in 20 as the level of significance, there is always the possibility that the strength of the relationship would not stand up in subsequent samples and this possibility is strengthened if only one comparison out of several with somewhat similar elements shows a significant relationship.

Personality rating scales *A* and *B* each show but a single significant relationship. To the extent that an interpretation may be made from such slender evidence, the ending choice seems to bear a direct relationship to the personality rating: those rated "uninhibited" in expressing emotion avoid self-blame when the football team does not follow the advice of the central character, and those rated "peaceable" select the ending in which both mother and dog are safe.

Four different stories differentiated between subclasses on the self-confidence scale (Scale *C*). The children rated as above average in self-confidence, as compared to the rest of the Control group, were distinguished by their tendency to avoid blame ascription. In the football game story the self-confident chose more frequently the "better luck next time" ending, and they avoided particularly the ending in which the central character blames himself for the failure to win. In this story they differed most markedly from those rated "average" on the scale who tended to have the central character blame himself. The children rated as below average in self-confidence occupied an intermediate position so that the gradient of preference for the "self-blame" ending ran from a low degree of preference for self-blame by the self-confident, through those lacking in self-confidence to a higher degree of preference for self-blame on the part of the average raters. In the broken glass story (F2, S14), the self-confident avoided blaming the person who first dropped the glass while those rated as low in self-confidence overchose

that ending and the average raters occupied an intermediate position. The results from the two stories combined may be summed by saying that the self-confident were less apt to ascribe blame. The average found fault with themselves, and those lacking in self-confidence cast blame upon others. This picture of the individuals rated low in self-confidence as outwardly passive while inwardly finding fault with others is supported by the story of the child who collides with his mother (F1, S12) and is punished. He retires passively but inwardly considers his mother mean. Again in the baseball story (F1, S15), when told he cannot play, the children rated as low in self-confidence have the central character withdraw from the scene without open resistance.

Only three of the child-response stories had endings significantly related to ratings on Scale *D* (daydreaming to nonintrospective) and all of these lay between the five and two per cent level of significance. It will be noted from Table 16 that the "daydreamers," as compared to the remainder of the group, tended in F1, S14 to avoid self-blame. In this respect they may be said to resemble those pupils rated low in self-confidence. As set forth in Table 14, there is a correlation of  $-.25$  between Scales *C* and *D*. The average pupils on this scale show a tendency toward passivity on one story. When the central character in F1, S15 is told that he cannot enter the ball game, ending "A" describes him as withdrawing passively while inwardly thinking the other boys mean. This ending was overchosen by children rated "average" on Scale *D*. At the opposite end of the scale the nonintrospective pupils, who have a tendency previously described toward neutral responses, significantly overchoose one ending to the football game story (F2, S13) in which the chief character blames neither himself nor his teammates. This is the same tendency found for "self-confident" pupils on the same story. As pointed out above, there is a correlation between the two sets of ratings.

The average raters on Scale *E* (poorly behaved to well behaved) select a more passive reply to the story describing exclusion from the ball game than do either of the two deviate subclasses. This was also true of the average raters on Scale *D*. It would appear that these average pupils may have less hostility or less aggressiveness than the more extreme pupils. Like the pupils rated self-confident and nonintrospective, the well-balanced pupils avoid either self-condemnation or verbal aggression in the football story and merely say "better luck next time." This is in conformity with the hypothesis previously advanced that in these child-response stories subjects tend to select endings which directly reflect their own thoughts and feelings.

## V. RELATION BETWEEN RESPONSES TO INDIVIDUAL PARENT-REACTION STORIES AND OTHER VARIABLES

The stories calling for parental reaction have previously been considered in the aggregate, either by determining the relationship between variables and *d-R* scores derived by attaching a numerical value to each response and summing the responses for each individual or by summing the accepting, neutral, and rejecting responses and studying the differences in the proportion of these responses for the different groups under consideration.

The total discrimination of the whole test depends on the discriminations made by the items of which the test is composed—in this case, the individual stories. It would be very surprising if these stories were homogeneous in respect to the responses elicited and in the relationship of these responses to various variables.

Of primary interest is the relationship between experimental group membership and response to individual parent-reaction stories. It has already been demonstrated that the stories as a whole do not reliably discriminate between the Control and Reject groups. The differences between parent-reaction story ending choices made by the Control and Reject groups were tested for significance by the use of the chi-square statistic. Of the 20 parent-reaction stories, only two elicited differential responses from the Control and Reject groups great enough to yield statistically significant chi-squares. Both chi-squares had a significance level between .05 and .02. The result is unimpressive in view of the fact that one "significant" chi-square would on the average be found out of every 20 due to the effects of random sampling alone. Furthermore, the rest of the chi-squares in the series showed a distribution approximating that which would arise from random sampling.

The first significant chi-square (7.663 with two degrees of freedom) was derived from the responses to F1, S6 the story of the child who cannot find a library book and who asks the assistance of his mother who is lying down with a headache. The Reject group chose the neutral response with relatively lesser frequency and the accepting response with relatively greater frequency. The second chi-square was derived from F1, S10 in which a child "quietly" taking crackers in the kitchen overhears a neighbor disparaging her own children to the child's mother. The Reject group, as compared to the Control, chose less frequently the rejecting ending and more frequently the neutral ending. If these two chi-squares are not due to the vagaries of sampling, there may be some significance in the fact that Control

TABLE 17  
INDIVIDUAL PARENT-RESPONSE STORY ENDINGS CHOSEN WITH SIGNIFICANTLY DIFFERING  
FREQUENCIES BY VARIOUS SUBCLASSES OF THE CONTROL GROUP<sup>a</sup>

Scale	Rating	Form (F) and Story (S) Number	Letter Designation of Ending	Significantly Overchosen (+) or Under chosen (—)	Chi-Square and Statis- tical Signi- ficance Level <sup>b</sup>
A	Reserved	F1, S5	A	—	7.369***
		F1, S7	C	+	5.776**
		F2, S3	A	+	5.797**
		F2, S5	A	+	4.828*
		F2, S6	A	+	6.431**
	Average	F1, S1	A	+	9.273***
		F1, S1	C	—	8.268***
		F1, S5	A	+	16.570***
		F1, S5	C	—	7.108***
		F1, S6	A	+	7.103***
		F1, S7	A	+	5.914**
	Uninhibited	F1, S1	A	—	4.510*
		F1, S2	C	—	5.265*
		F1, S6	A	—	4.198*
		F2, S6	A	—	6.507**
B	Quarrelsome	F2, S8	B	—	3.990*
	Average	F1, S2	B	—	5.512**
		F1, S9	A	—	8.532***
		F1, S9	C	+	7.142***
	Peaceable	F1, S2	B	+	5.730**
		F1, S5	B	+	5.917**
		F1, S9	A	+	4.574*
		F1, S9	C	—	7.680***
		F2, S3	B	—	8.319**
		F2, S6	A	+	7.447***
		F2, S6	C	—	5.814**
		F2, S8	B	+	5.558**
C	Self-Conf.	F1, S6	A	—	4.140*
		F1, S6	B	+	5.069*
		F1, S7	C	—	4.205*
		F2, S1	B	+	4.378*
		F2, S2	B	+	4.382*
		F2, S3	A	—	4.878*
		F2, S6	C	+	5.351*
	Average	F2, S1	A	+	7.354***
		F2, S1	B	—	5.511**

<sup>a</sup>The first entry in the table is read as follows: Pupils rated as more reserved than the average on Scale A chose ending A to Story 5 of Form 1 less frequently than did the remainder of the Control group. The chi-square computed from a four-fold table in which the columns represent respectively the listed subclass and the remainder of the Control group and the rows represent respectively the choice of ending A and the choice of any other ending is 7.369 which is statistically significant at the .01 level of confidence.

<sup>b</sup>\*Statistically significant at the .05 to .02 level of confidence.

<sup>b</sup>\*\*Statistically significant at the .02 to .01 level of confidence.

<sup>b</sup>\*\*\*Statistically significant at or above the .01 level of confidence.

TABLE 17 (continued)

Scale	Rating	Form (F) and Story (S) Number	Letter Designation of Ending	Significantly Overchosen (+) or Under- chosen (—)	Chi-Square and Statisti- cal Signifi- cance Level <sup>b</sup>
D	Lack of Self-Conf.	F1, S1	C	+	3.960*
		F1, S7	C	+	7.742***
		F2, S1	C	+	6.045**
		F2, S2	A	+	7.968***
		F2, S3	A	+	8.502***
		F2, S6	C	—	7.184***
	Daydreamers	F1, S4	A	+	3.996*
		F1, S5	B	—	4.571*
		F1, S5	C	+	6.427**
		F2, S8	A	+	4.363*
		F2, S8	B	—	5.791**
		F2, S8	B	—	5.791**
	Average	F1, S5	C	—	5.784**
		F1, S6	B	—	4.641*
		F2, S4	A	+	4.053*
		F2, S4	B	—	4.579*
		F1, S2	B	+	4.836*
		F1, S2	C	—	4.084*
	Non-Intro- spective	F1, S6	B	+	5.993**
		F2, S3	A	—	4.578*
		F2, S8	A	—	5.194*
		F2, S8	B	+	3.905*
		F2, S10	A	+	5.685**
		F2, S10	B	—	4.317*
E	Poorly Behaved	F1, S5	B	—	5.468**
		F2, S4	A	+	7.560***
	Average	F1, S5	B	+	4.825*
		F1, S5	C	—	6.270**
		F2, S4	A	—	4.817*
	Well Behaved	F1, S3	B	+	4.780*
		F1, S3	C	—	4.043*
		F1, S10	A	—	4.083*
	Attention- Seeking	F2, S6	A	—	4.504*
		F2, S6	C	+	6.657***
		F2, S8	B	—	4.902*
F	Average	F1, S1	A	+	5.543**
		F1, S5	A	+	3.995*
		F2, S2	A	—	9.358***
		F2, S2	B	+	5.506**
		F2, S5	A	—	4.117*
		F2, S5	B	+	4.117*
	Shy	F2, S10	A	+	4.576*
		F1, S7	C	+	3.914*
		F2, S2	A	+	7.003***
		F2, S2	B	—	6.083**
		F2, S6	A	+	10.354***
		F2, S6	C	—	9.545***

Since the data below this point rests on dichotomies, only one-half the dichotomy is listed under "Rating." The chi-square for the other member of the dichotomy is the same but the sign indicating over- or under-choice (+ or —) is reversed.



TABLE 17 (continued)

Scale	Rating	Form (F) and Story (S) Number	Letter Designation of Ending	Significantly Overchosen (+) or Under- chosen (—)	Chi-Square and Statis- tical Signi- ficance Level <sup>b</sup>
Chrono- logical Age	Older	F1, S1	A	+	4.690*
		F1, S1	C	—	6.412**
		F1, S2	A	—	4.662*
		F1, S6	A	—	4.914*
		F1, S9	A	+	8.228***
		F1, S9	B	—	4.286*
		F2, S2	B	+	4.134*
		F2, S7	A	—	4.386*
		F2, S10	C	+	4.626*
Mental age	Higher	F1, S1	A	+	4.880*
		F1, S1	C	—	10.428***
		F1, S3	A	+	6.432**
		F1, S3	B	—	12.378***
		F1, S4	B	—	4.328*
		F1, S6	B	+	11.340***
		F1, S9	A	+	4.496*
		F2, S1	B	+	10.428***
		F2, S1	C	—	9.096***
		F2, S2	A	—	12.914***
		F2, S2	B	+	11.214***
		F2, S3	A	—	14.230***
		F2, S4	A	—	4.774*
		F2, S6	C	+	5.416**
		F2, S10	B	—	4.742*
Sex	Boys	F1, S5	C	+	11.446***
		F1, S7	A	—	7.224***
		F1, S7	B	+	8.228***
		F2, S4	A	+	4.156*
		F2, S5	A	+	6.226**
		F2, S5	B	—	6.226**
		F2, S6	A	+	4.664*
		F2, S7	C	—	4.224*

group subgroups in some instances which tended to favor accepting responses showed a trend toward rejecting responses on these two stories.

Table 17 shows the significant chi-squares for the parent-reaction stories in both forms. These data are based on the normative Control group population of 280 cases arranged in four-fold tables as described in the interpretive footnote to Table 17.

This item analysis material is of value in separating the more discriminating stories from the less discriminating. If it is to be examined with a view to determining the stories yielding the highest relationship to personality ratings given by teachers, we will be interested in the number of significant chi-squares in the personality columns. Table 18 lists the stories in order

TABLE 18  
SUMMATION OF THE NUMBER OF SIGNIFICANT CHI-SQUARES APPEARING IN THE  
PERSONALITY RATING COLUMNS OF TABLE 17

Form (F) and Story (S) Number	Number of Significant $\chi^2$
F1, S5	11
F2, S6	10
F2, S8	7
F1, S6	6
F2, S2	6
F1, S1	5
F1, S2	5
F1, S7	5
F2, S3	5
F1, S9	4
F2, S1	4
F2, S4	4
F2, S10	3
F2, S5	3
F1, S3	2
F1, S4	1
F1, S10	1
F1, S8	0
F2, S7	0
F2, S9	0

of the number of significant relationships to personality ratings which each story yielded. With three ratings to each of six scales and three endings to each story, 54 chi-squares can be computed for each story and hence approximately three "significant" chi-squares at the .05 level of significance could, on the average, be expected from chance alone. This fact and the significance levels for the stories as shown in Table 17 should be borne in mind in the interpretation of Table 18.

Table 18 shows that the stories vary widely in discriminative power. More careful preliminary analysis of all the implications and nuances of experimental stories might result in stories of greater validity when personality ratings are used as criteria.

#### A. DIFFERENCES BETWEEN BOYS AND GIRLS IN THE RESPONSES TO INDIVIDUAL STORIES

When the responses of boys are compared to those of girls, six of the stories yield statistically significant chi-squares. In two of these, boys chose with greater frequency endings in which the parent suspected the child of wrong-doing. In F1, S5, where the child finds the dollar, the boys' over-choice was, "Are you sure you found it or did you take it? I want the truth." When the policeman inquires because he has found the child's

lost pocketbook (F1, S7), the boys' overchoice is, "What's he been up to now? Did he do something bad?" The tendency of boys to depart most greatly from girls in their responses when the rejection is particularly harsh appears again in the "prison cell" story (F2, S5). The boys are significantly less likely to have the parents arrive to visit the confessed criminal. Of the remaining three stories, F2, S6; F2, S7; and F2, S4, the last named is worthy of special note. In this story, the child complains of a sore throat on the morning of a school examination. The ending which the experimenter and the judges considered accepting is: "That is too bad. You will have to stay in bed and I will get you some medicine." The largest chi-square yielded by this ending is due to an overchoice by pupils rated high in school misbehavior. After considerable experience in individual administration of this story, the experimenter has found that the "That is too bad" is interpreted by many subjects as being sarcastic and the medicine promised is probably castor oil. Hence, what the experimenter took as acceptance, many children interpret as punishment!

If we may draw a tentative conclusion from such limited material, it would be that we are most likely to get the sharpest difference between the sexes when there is opportunity to choose a harsh ending, particularly if it indicates the parental feeling that the child is guilty of serious misconduct.

#### B. MENTAL AND CHRONOLOGICAL AGE AND INDIVIDUAL STORY RESPONSES

A large number of stories show a relationship to mental and chronological age. By and large, these relationships reflect the general tendency of the mature to select more accepting endings. It is not evident why some of these stories show this tendency more strongly than others. Three stories are an exception. In the "field-meet story" (F1, S3), the children of higher mental age strongly avoid the more accepting ending and overchoose the neutral ending. The boasting described in the story seems to call forth in many children who usually choose accepting endings the feeling that a rebuke is deserved. A neutral overchoice for children of higher mental age also appears in the "lost book story" (F1, S6). This may be due to the feeling that the child may be somewhat at fault if the book is missing; hence, a useful suggestion is coupled with a mild rebuke. The third story involving the "sore throat" (F2, S4), previously discussed in considering sex differences, also appears again because the "I will get you some medicine" ending is strongly avoided. When this is interpreted as a punishment threat, however, the response conforms to that expected of the more mature.

## VI. SUMMARY AND DISCUSSION

This report describes a projective experiment using incomplete stories with multiple-choice endings. Twenty of the stories presented parent-child situations. The subjects were instructed to select an ending describing the most likely parental reaction. Ten stories dealt with parent-child or child-child situations which called for the most likely reaction of the child in the story. Before the subjects could turn the page and see the multiple-choice endings to each story, they had to write a free-response ending of their own. They were instructed to select the multiple-choice ending most like what they had written. The endings to the parent-response stories represented gradations on an acceptance-rejection continuum according to the ratings of 10 judges.

The subjects were divided into two groups: a Control group of 280 children designed to be representative of the sixth and seventh grade public school population in Elizabeth, New Jersey, where the experiment was performed, and a Reject group of 50 sixth and seventh grade pupils in the same city. This group was deemed to be rejected as rejection was defined in this experiment on the evidence of social agency and case records which were read by the investigator and two trained social workers. Only cases in which there was unanimous agreement were included.

The mean chronological age of the Reject group exceeded that of the Control group by 12.10 months while the mean mental age of the Reject group fell below that of the Control group by 4.38 months. The Revised Stanford-Binet Scale, Form *L*, was used to determine the mental age of the Reject group while that of the Control group was computed from the mean results of two Pintner General Ability tests, Verbal Series, which had been previously administered. The Control group contained 50 per cent boys while the Reject group had 58 per cent boys. The occupational level of the parents of the Reject group was lower than that of the Control group. All these differences must be borne in mind when interpreting the results.

The experiment had as its central problem the determination of whether or not the Reject group would tend to select more rejecting parental-response endings than the Control group. The second hypothesis to be tested was that rejected children who were characterized by daydreaming, shyness, and reserve would select more accepting parental-response endings to the incomplete stories than rejected children who were overtly aggressive, attention-seeking, and nonintrospective. Thirdly, it was desired to study the relation of the responses to mental and chronological maturity, sex and

personality traits as measured by teachers' ratings, and occupational level of the parents.

The consistency or reliability of the responses was determined by scoring the parental-reaction responses. Endings which the judges considered accepting were given three points; neutral endings, two points; rejecting endings, one point. The parental reaction stories were divided into two forms which were as comparable as the experimenter could make them after preliminary trials. The two forms were given consecutively. Nine stories were scored in the first form and 10 in the second. The product-moment coefficient of correlation computed from the scores on the two forms was  $.51 \pm .03$  and the Spearman-Brown formula for estimating the reliability of all the 19 scored items gave a reliability coefficient of  $.68 \pm .03$ . When the limited number of items entering into the scores is taken into consideration, it appears that the consistency of the subjects in responding to the stories compares favorably with the consistency of subjects responding to direct questions on conventional personality questionnaires.

As to validity, first consideration was given to the question as to whether the stories calling for parental response distinguish reliably between the Control and the Reject group. The projective materials do not make such a distinction either when the results are in score form or when the differences in the mean number of accepting, neutral, and rejecting responses in the two groups are tested separately for significance.

The second hypothesis to be tested was that rejected children rated "shy," "reserved," "daydreaming," etc., would have more accepting scores than rejected children with opposite ratings. Within the Reject group significant relationships were found between personality ratings and *A-R* scores, but these relationships were curvilinear. Breakdowns by ending type disproved the second hypothesis. The "uninhibited" children on Scale *A* chose significantly more accepting endings than either the "reserved" or "average" children. The "reserved" chose significantly more neutral responses than the "uninhibited" while the difference in the frequency of rejecting choices did not attain significance. Furthermore, the children rated "quarrelsome" chose more accepting endings than those rated "peaceable" and significantly more than those rated "average." In the choice of neutral responses the peaceable significantly exceeded the quarrelsome. These findings demonstrate the existence of significant relationships between responses to incomplete stories and personality ratings but at the same time they serve as a warning against attempts at interpretation in terms of simple linear regression.

It was demonstrated that there was a significant relationship between the parental-response endings selected by both experimental groups and chronological age, mental age, sex, and teacher ratings on personality traits. Some of the highlights of these relationships may be summarized as follows:

1. Older children in the Control group chose more accepting and fewer rejecting endings. Older children in the Reject group also chose significantly fewer rejecting endings.

2. When the experimental groups were dichotomized on the basis of mental age, both groups showed a tendency for the children of higher mental age to select more neutral and fewer rejecting responses.

3. Boys in the Control group as compared to girls chose more rejecting and fewer accepting responses. While the sex differences within the smaller Reject group were in the same direction and of larger absolute magnitude, they were not statistically significant.

4. Within the Control group, teacher ratings of "reserve" and "uninhibited" on Scale *A* were associated with lower frequencies of accepting responses.

5. Within the Control group "peaceableness," "objectivity," "good behavior," and "shyness" were all positively associated with higher frequencies of neutral ending choices. Within the Reject group, "reserve," "peaceableness," and "good behavior" showed the same relationship to neutral choices.

Generalization was more difficult for the child-reaction stories since each story stands individually. In general, it appeared that children tended to select endings in which the child character acts in accordance with the selectee's own personality characteristics. Children in the "reserved-shy" cluster tended to select non-aggressive endings. They also tended to select endings in which the child character avoids taking blame upon himself but inwardly casts it upon others. Boys, as compared to girls, selected more endings characterized by overt aggression.

There was a demonstrated relationship between responses to many child-reaction stories and *A-R* scores. Higher *A-R* scores were associated with the choice of endings to the child-reaction stories in which the child in the story displayed the following characteristics: (*a*) Concern for the parent's welfare and desire to help the parent, (*b*) absence of an expectation that an injury will happen to the parent, (*c*) stronger superego development as exemplified in having the child character blame himself in ambiguous situations in which blame may be put either on the self or on others and in the expectation that the child character will be able to resist temptation.

This experiment throws additional light on the projective process. The experimental subjects showed a degree of consistency in their responses to the parent-reaction stories so that there was a significant correlation in their responses on the two forms. Furthermore, the responses on many of the child-reaction stories showed a significant relation to *A-R* scores which was in keeping with current theory concerning parental attitudes and child behavior. In addition to these internal consistencies in the projective responses, there was a positive relationship between the attribution to the parent of certain kinds of behavior and the presence in the child of traits which writers in the field of parent-child relationships generally feel are associated with such forms of behavior. The forces in the projective process which produce these results may be termed *direct projection*. The experimental results show, however, that in addition to *direct projection* there is a distorting force operating which causes the more mature chronologically and mentally to move away from the attribution of rejecting behavior to the parent. If we can safely assume that the Reject group children have experienced more rejecting parental behavior than the Control group as a whole, then this distortion force causes them to give as favorable a picture of parental behavior as is given by the Control group. Within the Reject group this force appears to be strongest in the "uninhibited" since they chose significantly more accepting responses than the "uninhibited" in the Control group. It appears to be weakest in those rated "objective" on Scale *D* since they chose significantly more rejecting responses than those of the Control group with the same rating. Hence, it would appear that the distorting force operated with less strength in those very Reject children which were deemed by their teachers to possess more objectivity than the remainder of the Reject group.

## APPENDIX

Below is reproduced the projective materials used in this study. The forms for boys are shown. Girls received stories in which girls' names were employed except in the case of Story 13, Form 2. In the original format there was a blank space for a free response after each story and the multiple-choice endings appeared on the following page.

This is a test to see how much you know about human nature and what you would expect people to do under different conditions. On the following pages are some short stories. Read each story. Next, underneath the story, write what you would expect the person in the story to say or do next. Then turn over the page. At the top of the next page, you will find three choices: *A*, *B*, and *C*. Put an "X" by the choice that seems most like what you have written on the page before. If none of the choices are anything like what you have written, take the choice which seems most like what the person in the story would do.

### FORM 1, BOYS

#### No. 1

Peter's mother gave Peter a dollar bill and sent him to the store to buy some groceries. When he got to the store, Peter found that he had lost the money. He looked everywhere along the sidewalk but could not find the dollar. Finally he went home and told his mother, "I have bad news. When I got to the store, I found that I had lost the money. I've looked everywhere but I cannot find it."

What did Peter's mother say?

- A. You should have been more careful but I know everyone could lose money. Are you sure you looked everywhere for it?
- B. I don't understand how you could do such a thing. Go out and look some more.
- C. Such carelessness! Either find that money or you will get punished and have nothing to spend until you have made up what you lost.

#### No. 2

"But I don't want a blue coat," said Sam. "I want the brown coat. Nobody wears blue coats like that."

"The blue coat is better material even though it costs less money. Besides it fits better," said his mother.

"I won't wear it," said Sam. "You can get it, but I'll wear my old coat before I'd wear such a thing."

What did Sam's mother say then?

- A. You are being stubborn. You're going to wear the coat I like and get punished when I get you home.



- B. You should appreciate what you get. Either take the blue coat or wear your old one.
- C. Well, we'll take the coat you want. You have to wear it.

## No. 3

May 25th had been one of the big days at the school. It had been the school field day with jumping, racing, baseball, and other events. Harold had won the 50-yard dash as well as the baseball throw and the running broad jump. He felt very proud to have won more events than any other student in the school. *Now* he could no longer be called "clumsy" and "awkward."

Although it was hard, Harold managed to hold in the big news until dinner time. Just after his mother scolded him for passing the bread carelessly, he made his big announcement.

"Today at the field day who do you suppose won the 50-yard dash? I did! And who won the baseball throw? I did! And who won the broad jump? I did!"

What did Harold's mother say then?

- A. That's nice to win. Now I hope you will not be so clumsy around home.
- B. That is fine. I'm certainly very proud of you.
- C. My you're conceited! Don't brag so much or you'll never be liked.

## No. 4

Allen reached home from school nearly an hour late.

"Where have you been all this time?" asked his mother.

"Some money disappeared from the teacher's desk, and the principal kept the whole class in to see what she could find out about it," Allen explained.

What did Allen's Mother say?

- A. Stealing is a very bad thing. Remember what I have always told you about it.
- B. Did you take that money? Don't lie to me about it, because I'll be sure to find it out.
- C. Well, I hope the teacher found her money, I had begun to wonder what was keeping you.

## No. 5

The dollar bill was lying on the edge of the sidewalk when Van noticed it. Surprised at finding such a lot of money, he picked it up and put it in his pocket. He planned to tell his mother about it, but as soon as he got home, he found his cousins there. He was so glad to see his cousins that he forgot all about the dollar. The next day when Van was putting on his coat the dollar fell out of the pocket.

"Where did this dollar come from?" asked Van's mother.

"I found it on the street and forgot to tell you," said Van.

What did his mother say?

- A. We must see if there is anyone around here who lost a dollar. If we don't find out who lost it, you may keep it.
- B. You shouldn't have forgotten it. You must try and find out who lost it.
- C. Are you sure you found it or did you take it? I want the truth.

*No. 6*

"I *must* find that library book," thought Ralph. The teacher had said that his report on wheat raising had to be in tomorrow. Now the book with all the information he needed was missing! Ralph had searched everywhere. "Maybe mother stuck it away somewhere," he thought. He went to the bedroom door. His mother had gone to bed complaining of a headache. Ralph could see that she was asleep. But he had to have that book! "Mom," he called. His mother raised herself up on one elbow and looked at him sleepily. "Have you seen that library book I brought home on wheat farming?"

What did Ralph's mother say?

- A. Why did you wake me up when I have a headache? I can't keep track of your books.
- B. You might look on your desk or the table in the living room. If you looked after your books, you wouldn't have to wake me up.
- C. No, I didn't see it, but if you need it badly, I'll get up and help you find it.

*No. 7*

Bert received a new pocketbook for Christmas of which he was very proud. It had a card inside for the owner's name so that it could be returned to the owner if lost. One day Bert lost his pocketbook on the way to school. A few minutes later it was found by a policeman who took it to Bert's house. When Bert's mother opened the door, there stood a policeman who said, "Does a boy named Bert live at this address?"

What did the mother think when she heard this?

- A. Yes, he does. Is he all right? I hope there hasn't been an accident.
- B. What's he been up to now? Did he do something bad?
- C. Yes, he lives here. Why do you ask?

*No. 8*

Everything seemed to go wrong that morning. Tom's parents didn't hear the alarm clock and overslept. Just as everyone was hurrying so Tom could get to school and Tom's father to work on time, something went wrong with the toaster and it refused to work. On top of that, Tom couldn't find one of his shoes. The hour was getting later and later and still he couldn't find that shoe.

"You'll have to hurry or you'll be late," said Tom's mother. "What are you looking for?"

"I can't find my other shoe," said Tom.

What did Tom's mother say then?

- A. You should put your shoes where you can find them. Now you may be late.
- B. Well hurry and look for it. I'll help you.
- C. You're always losing your things. If you're late, you're going to be punished.

*No. 9*

Don had been sent with a note to deliver to Mrs. Morton on Pine Street. "It is very important," said Don's mother, "that you deliver this message because it is about the club meeting tonight. Mrs. Morton did not come to the last meeting, and we want her to know about it." Don did not know Mrs. Morton nor had he been on Pine Street before.

Don took the message to the number which he thought his mother had given to him. The woman who answered the door said, "My name is not Mrs. Morton. I don't know any Mrs. Morton around here. We just moved in." Don did not know what to do. He was afraid he might have forgotten the correct number of the house.

When he got home and told his mother, what did his mother say?

- A. Thanks for trying. I'll try to locate her myself.
- B. I don't see how you could be so stupid. You can't remember anything at all.
- C. I'm sure I had the right number. Are you sure you went to the right house?

*No. 10*

Earl was standing in the kitchen quietly taking some crackers from a box. He could hear his mother talking in the living room with Mrs. Smith who lived across the street. His mother did not know he was in the kitchen.

"I can't be very proud of my children's looks," Mrs. Smith was saying. "May is really homely and Sonny has the big ears that all the Smith's have. They're not at all like your Earl."

What did Earl's mother say then?

- A. I think your children are fine looking, but as for my Earl, he is very sneaky and disobedient.
- B. You shouldn't say that. I think your children are just as good looking as my Earl.
- C. Well, Mrs. Smith, you should be proud of the nice personalities your children have.

*No. 11*

Maynard sat at the table. His last arithmetic problem was done but he had not put the book away. He was trying to decide whether

to go next door to play with his friends' new games or to stay home and listen to his favorite radio program.

Just then his mother came into the room. She was limping a little,

"What's the matter with your leg?" asked Maynard.

"My knee hurts. I guess I twisted it yesterday when I slipped on the steps. Now you get your homework done. I'm going to run down to the corner store for a few groceries."

What did Maynard say or do then?

- A. I have my homework all finished. May I go next door and play?
- B. You take a rest if your knee hurts. I will go to the store for you.
- C. When I finish my work, may I listen to the radio or play?

*No. 12*

Kenneth's favorite movie star was playing at the local theatre. Although it was a school night, Kenneth's mother had agreed to let him go with some friends.

"Now stay out of the kitchen," his mother said. "I'm busy getting dinner."

Kenneth went into the dining room and soon was busy trying to get the cat to chase a string. He went running around the room dragging the string while the cat chased it. Kenneth went charging past the door to the kitchen just as his mother came through with a platter of meat.

There was a crash as the platter hit the floor and broke. Gravy was all over the mother's dress.

"Now see what you've done," cried his mother. "Why didn't you obey? Go to your room. No movies tonight."

What did Kenneth say, think, or do then?

- A. "Oh, why do I always do the wrong thing?" thought Kenneth as he went to his room.
- B. "But why should I be punished?" complained Kenneth to his mother. "It was an accident."
- C. As Kenneth went to his room, he thought that his mother was treating him in a very mean and unfair manner.

*No. 13*

John and the other pupils were walking home from school. Suddenly John felt like grabbing Fred's hat. Then he started to run and Fred chased him. As he turned to see whether Fred was catching up, he tripped and fell flat on his face. All the other children laughed loudly.

When John got home, he found his mother in bed. "I have a strange pain in my chest," she explained. John went to his room. He threw himself on the bed. He felt sad and blue.

What was he thinking?

- A. He was worried about his mother, hoping that she wouldn't get sick.
- B. He wished that he had behaved himself and not grabbed the hat.
- C. He thought that if he hadn't looked around when he was running, he wouldn't have fallen.

*No. 14*

Jim was asked to scrub the back porch with a broom and a pail of water. Jim was just in the middle of it when his mother suddenly called him in the house. Just then Jim's father came along, stepped in the water and got his feet wet. He was angry and scolded Jim.

Jim thought:

- A. It's a good joke on him. He should have looked where he's going.
- B. It's my mother's fault. She should not have called me in the house when I was in the middle of cleaning.
- C. Why was I so forgetful that I left the pail right in the way?

*No. 15*

George was playing in the house that afternoon when he heard shouts outside. Looking out, he saw that the older boys had started a baseball game. He ran out of the house yelling, "Hey, let me in the game." Pete, who was pitching, looked George over coldly. "Naw," he said, "the sides are chosen and the game has started. Run along."

What did George say or do then?

- A. He went back in the house thinking how mean the other boys were.
- B. His feelings were hurt, and he decided that he would not play with those boys anymore.
- C. "Ah, give me a chance," he said. "I've got as much right to play as anyone else."

## FORM 2: BOYS

*No. 1*

School was out and George hurried home through the cold rain. Soon the water started coming through his shoes. Then George remembered that his rubbers were still in school. He had forgotten to put them on. By the time he reached home, his feet were soaked. "Oh, mother," said George, "I left my rubbers at school, and now my feet are all wet."

What did George's mother say?

- A. You had beter take off those wet socks and shoes right away or else you will catch cold.
- B. That was very careless of you to forget. Now you had better change your shoes and socks.
- C. Don't you have any sense? You are going to get punished for this.

## No. 2

Beside the regular family, Jack's Uncle Harry and Aunt Lucy were there for dinner.

"We never let our children listen to radio stories in the evening," said Aunt Lucy. "Most of the programs are too spooky. I think they cause nightmares."

"Most of the programs are too silly," said Jack's father. "Children would be better off if they put their time in on school work."

"I think you learn a lot from radio programs," said Jack, "and listening to them never gives me nightmares."

What did Jack's mother say?

- A. I agree with your father. You should put your mind on your school work.
- B. Perhaps you're right if you listen to worthwhile programs.
- C. Don't contradict your elders. They know best.

## No. 3

Andy walked slowly into the house. His report card was in his hand. He did not know whether to feel glad or sad. All his marks were good, *very good*, except arithmetic, and the arithmetic mark was *bad*. Arithmetic always had been hard for Andy.

"Well," said Andy's mother, "let's see your card."

As she looked at the card, Andy stood first on one foot and then on the other.

What did Andy's mother say?

- A. Your arithmetic is very bad. You'll have to be punished if you don't get a better mark next time.
- B. That's a very good report card except for your arithmetic. Bring your arithmetic home and we will help you with it.
- C. The card is good except for your arithmetic. You will have to work harder on that.

## No. 4

"Time to get up!" called Bud's mother. Bud lay in bed staring at the ceiling. He made no move to get up. This was the day of the big school examination.

"You'd better get up or you'll be late," said Bud's mother sticking her head in the door.

"I don't think I'd better," said Bud. "I have a bad sore throat."

Bud's mother looked at him and said:

- A. That is too bad. You will have to stay in bed and I will get you some medicine.
- B. Let me see your throat. I'm not sure you're really sick.
- C. You just don't want to go to school. Now get up at once!

*No. 5*

Joe sat in his prison cell. Soon the guards would come to take him to court. There he expected the judge would quickly sentence him to death.

After leaving home to take a job, Joe had fallen into bad company. This led to a life of crime. Just a few days before, Joe had shot a policeman while he and his friends were committing a robbery. Joe was caught at the scene of the crime. There was no use denying that he was guilty, and so Joe readily admitted the shooting.

He refused to tell the police his real name. He gave the police a false name—"Herbert Morrison." (To save his family from disgrace.) The reporters kept hanging around the jail hoping that he would have visitors. Then they could find out who he really was.

Joe's father and mother knew where he was because he had sent them a letter. This letter was smuggled out for him by a prisoner who was being released from the jail.

As Joe sat waiting, he wondered whether his folks would come. In the letter, he told them to stay away. Then no one would know that their son died a murderer. Still he would like to see them before he was taken away.

Just then Joe could hear the iron doors being unlocked.

What happened next?

(Choose either A or B.)

- A. The guard came in and said, "Come on, you're going to go before the judge."
- B. The iron door was unlocked and in came his father and mother.

*No. 6*

Lots of snow had fallen during the night. Harry was in a hurry to get his sled, for it was his first chance that year to go sledding. When he was ready to carry his sled out of the house, however, he discovered that the rope was missing. He hunted everywhere but could not find the rope.

"Where's the rope to my sled?" he called to his mother who was busy getting supper.

What did his mother call back?

- A. I don't know where it is. You will just have to look for it yourself.
- B. Don't bother me. You should be more careful. You're always losing things.
- C. Try looking in the corner with your other things. If you can't find it, perhaps we can get some other piece of rope which would do.

*No. 7*

Bill was playing ball with his friends in the back yard. It was Bill's turn at bat. Suddenly Bill's mother came to the back door.

"I've told you not to play ball in the back yard," she shouted. "Go and play some place else."

Bill did not want to lose his turn at bat. As soon as his mother had gone in, he called to the pitcher, "Just give me my turn and then we'll quit." The pitcher threw a fast ball. Bill swung. The bat cracked, and the ball sailed through the kitchen window with a crash. Bill's mother came running out of the house.

What did she say?

- A. Come right in the house you bad boy. You're going to get punished for this.
- B. See what has happened! Now you will have to pay for it out of your spending money.
- C. Bill, I told you to play ball somewhere else. Now see what has happened.

*No. 8*

John's hand reached out for the next branch of the big apple tree. He would soon be able to reach his airplane which was caught in the tree. Suddenly his foot slipped. There was a ripping sound, and John found himself flat on the ground. He got to his feet. His hand was bleeding from a big scratch, and his coat was badly ripped.

John hurried into the house. "Mother," he cried, "I fell out of the apple tree. Look at my hand. Look at my coat."

What did John's mother say?

- A. Come, I will put a bandage on your hand and then I will mend your coat.
- B. You should not have climbed in the tree. Now come, and I will fix your hand.
- C. Look at your hand and coat. You will just have to wear the coat with a big rip in it.

*No. 9*

Frank could not help whistling as he went home from school. He wanted to run but he did not dare. He was afraid he would mess his picture. The teacher had said it was the best picture in the class. Frank remembered that his mother was having company that afternoon. He hoped that his mother would show them the picture too.

When Frank reached home, there were several women talking with his mother. Frank tip-toed in and showed the picture to her. "The teacher said it was the best picture in the class," he explained.

What did Frank's mother say?

- A. You shouldn't brag. Go now and don't interrupt as it is not polite.
- B. It is very nice, but don't interrupt me now when I have company.
- C. That's a very good picture. I will show it to our company.



*No. 10*

Ray and his two friends Jerry and Tom were hard at work on the floor of Ray's living room. They had colored paper, shears, paste and crayons. With these they were making masks for Halloween. Ray cut a lot of red paper into fine pieces.

"I'm going to make a devil mask," he said, "with red hair and black horns."

"I'm making a pumpkin head," said Jerry.

"Are you sure your mother won't mind all this stuff on the floor?" asked Tom.

Just then they heard the front door open and shut and Ray's mother came into the room.

What did she say?

- A. It is all right to entertain your company, but be sure to clean up everything when you are through.
- B. Clean up this mess right now. You should know better. Always making extra work!
- C. Those look like good masks. Be sure to pick up the scraps when you are through.

*No. 11*

There was once a boy named Jack who got in with a bad gang of boys. These boys taught Jack how to steal candy. One boy would get the attention of the storekeeper while another boy stuffed candy in his pockets.

Finally, however, Jack was not quick enough and the storeman caught Jack. He called a policeman who took Jack home and told Jack's father what had happened. The father talked to Jack seriously for a long time about how bad it was to steal. Jack promised that he would never steal again.

A short time after this while Jack was standing by some candy in a drug store, the drug store man was called out back of the store to talk with some carpenters who were repairing the building.

What did Jack think and do then?

- A. Jack wanted the candy very much so he quietly slipped a few pieces into his pocket.
- B. Jack wanted the candy but he kept himself from taking any.
- C. To keep from taking the candy Jack had to leave the store so that he would not be tempted.

*No. 12*

John and two other boys were throwing snowballs at each other in the school yard. The two other boys threw at John and then ran. John was just throwing at them when a teacher came out.

She took John to the principal.

"You know it's against the rules to throw snowballs" said the principal. "Do you have anything to say for yourself?"

What did John say?

- A. John did not want to tell on the other boys so he said, "No, I have nothing to say. I was in the wrong."
- B. John said, "I was throwing snowballs, but if you won't punish me, I'll promise never to do it again."
- C. I was only defending myself. The other boys threw at me first and I threw back at them.

*No. 13*

The big football game between West High School and East High School was on. The East High team was much heavier, but the West High team had managed to tie the score by hard work and the smart playing of their star, Ted Brown.

Now there was only a minute left to play and West High was only five yards from the goal line. If Ted could put the ball over, West High would win.

The West High team went into a huddle. "Let's try a play right through the line," Ted suggested.

"No, no," said Fred Fuller, "throw me a pass. We've gained a lot on that."

"That's just it," said Ted. "They expect a pass now but they don't expect a play through the line."

But all the other players agreed with Fred Fuller. They wanted to try a pass because it had worked before. Ted finally said he would try a pass. The play was called. Four East High men were on top of Fred before he could even get started. Ted tried to pass to another man but East High was ready for him too and the pass was incomplete. Just then the whistle blew and the game was over.

Ted and the rest of the team ran to the dressing room. He felt miserable because they had been so close to winning.

What did he say to the other boys when they got inside?

- A. Well fellows, it's too bad we lost, but we played a good game. Better luck next time.
- B. If you all hadn't been so dumb and had listened to me, we would have won the game.
- C. I could kick myself. If I had only been a little quicker in throwing that pass, we might have won.

*No. 14*

As Edward was going to school, he saw sharp glass all over the sidewalk where someone had dropped a milk bottle. He stepped over the glass and hurried on.

After school had started, George who was often tardy, came crying into the classroom. His knee was bleeding badly.

"I was running to school to keep from being late," he told the teacher. "I didn't see the glass on the sidewalk and I slipped and cut my knee."

What did Edward think when he heard this?

- A. It serves George right! If he started to school on time, he would not need to run.
- B. It's all my fault! If I had pushed that glass off the sidewalk, there would not have been an accident.
- C. Whoever dropped that milk bottle in the first place should have cleaned it up.

#### No. 15

Bill sat on the back porch with his arm around his dog Rex. He felt sad. His parents had told him that morning that he would have to get rid of Rex because he snapped at strangers. Just then his mother came out the back door.

"I am going across the street to see Mrs. Jones," she said.

As she went around the corner of the house, Rex got up and followed her. Bill started to play with his ball. Just then he heard the screech of automobile tires followed by a crash. As Bill ran around the corner of the house, what did he see?

- A. His mother had been hit by a car.
- B. Rex had been hit by a car.
- C. His mother and Rex were safe. Two cars had collided.

Below are reproduced the pupil behavior rating scales which were filled out by teachers. In the original format each scale appeared on a separate sheet.

Place a mark before the number under each heading which best describes the pupil as you have observed him.

A. Does the pupil tend toward reserve or toward open display of feelings?

- 1. Very reserved, seldom displays feelings, rarely expresses personal thoughts; may tend to be "poker-faced"; often hard to tell what is going on inside; one of the most reserved children in the class.
- 2. A more reserved child than the average, may sometimes express feelings or personal thoughts if drawn out, but less expressive than most in the class.
- 3. Displays his emotions and feelings about as much as the average child in the class.
- 4. A more open and less reserved child than the average; expresses feelings and thoughts quite freely, usually easy to tell how he feels.
- 5. Emotions very rarely concealed; holds nothing back; gives uninhibited expression to thoughts and feelings.

**B. Does the pupil tend to be quarrelsome or peaceable?**

- 1. Frequently starts quarrels, arguments, or fights; shows much hostility toward others; quick to take offense; one of the most aggressive children in the class.
- 2. More quarrelsome and aggressive than the average but not one of the most aggressive in the class.
- 3. About like the average child in the class.
- 4. Likes to keep the peace more than the average child; is usually friendly with everyone; seldom gets into a quarrel or disagreement.
- 5. Very peaceable disposition, never starts quarrels; one of the least aggressive and most peaceable children in the class.

**C. How much confidence does the pupil have in himself?**

- 1. Practically always has confidence in himself, a high degree of self-assurance; has faith in his ability to succeed and in his own ideas and skill; one of the most self-confident in the class.
- 2. More self-confidence than the average although not one of the most self-confident in the class.
- 3. About as much self-confidence as the average child.
- 4. Not as much self-confidence as the average although not one of the least self-confident in the class.
- 5. Pupil has very little confidence in himself; nearly always expects to fail; hence he may shrink back from attempting anything. (May look to others for a pattern to follow rather than doing his own thinking; "yes" man type.) Among the least self-confident in the class.

**D. Is the pupil more concerned with inner thoughts or with his immediate surroundings?**

- 1. Often seems to be concerned with inner thoughts or daydreams rather than with the work at hand or what is going on around him. "Out-of-this-world" most of the time.
- 2. Sometimes daydreams or slips off into inner thoughts. Has more of this tendency than the average but not so extreme as some in the class.
- 3. Keeps his mind on his surroundings generally, although he may daydream sometimes. About like the average child in the class.
- 4. Keeps his mind almost always on immediate environment. Daydreams very seldom.
- 5. Attention always concentrated on surroundings, on work, or activities in which he is engaged or what is going on around him. Not imaginative or introspective.

## E. How well does the pupil behave in school?

- 1. Always in difficulty, acts up in class, violates school rules, one of the most difficult children in the class.
- 2. A troublesome child who frequently acts up but not one of the worst in the class.
- 3. School behavior is about like that of the average child in the class.
- 4. Better-than-average behavior, a pupil who almost always does what is expected of him although not one of the very best behaved in the class.
- 5. One of the very best behaved in the class, an outstanding pupil in this respect.

## F. Does the pupil seek to draw attention to himself or does he avoid having attention directed toward him?

- 1. Constantly seeks to draw attention to himself, desires to always be in the spotlight; may use either socially approved methods such as frequently offering to perform errands and services for teacher, seeking to be a class or lesson leader, to recite or perform before group, or may use socially disapproved methods such as seeking to engage in chatty conversation, bothering with unnecessary questions, ostentatiously walking about room, etc.; among the greatest attention seekers in the class.
- 2. Frequently seeks attention but not as extreme in this respect as the kind of child described above.
- 3. Seeks attention about as much as the average child.
- 4. Seems to avoid attracting attention, rarely puts himself forward, somewhat shy.
- 5. Very shy, seems to be uncomfortable if the attention of others is directed toward him, seeks to remain in the background at all times, avoids situations where he will be noticed.

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# GENETIC PSYCHOLOGY MONOGRAPHS

Child Behavior, Animal Behavior  
and Comparative Psychology

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EARLY ADOLESCENT PERSONALITY . . . . . 231  
By ESTHER MILNER

SOCIAL PERCEPTIONS AND ATTITUDES OF CHILDREN . . . . . 327  
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## EFFECTS OF SEX ROLE AND SOCIAL STATUS ON THE EARLY ADOLESCENT PERSONALITY\* †

*Committee on Human Development, The University of Chicago*

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ESTHER MILNER

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Appendices A, B, C, D, and E, included in the original thesis copy, are not reproduced here but are on file in the University of Chicago Library.



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## I. THE HYPOTHESIS AND ITS THEORETICAL BACKGROUND

This thesis proposes to investigate the effects of two aspects of social training, those of social class and sex rôle, on the personalities of a group of 30 early-adolescent children of the upper-lower and lower-middle social classes (the "Common Man" grouping).

It is hypothesized that (a) the boys and the girls, as two sub-groups within the total group of 30, possess certain personality characteristics typical of each sex; (b) this entire group of 30 children possess certain personality characteristics typical of the total group of 30.

This study is undertaken to determine what these respective sex-typical and group-typical personality constellations are.

The above hypothesis is based on a number of propositions which are in turn derived from a body of anthropological and psychological research and theory. It is here proposed that the total American society is structurally divisible into a number of social classes; that each of these social classes may be considered, for the purposes of this study, to be a definable sub-culture; that as such, a social class has its own definite social expectations of the behavior of each of its members and trains them to conform to these expectations; that it expects different behaviors of its male and female members; that the family as the major training-agent of the sub-culture trains each child to conform to the behaviors approved by the sub-culture, and within this general emphasis trains each girl and boy to conform to the approved sex-rôle of that social class or sub-culture; that the social-class defined training produces a personality constellation typical for the children of that social class; that the sex-differentiated expectations and training therefor produces a constellation of personality characteristics typical of the girls and a constellation typical of the boys.

This chapter will discuss the body of concepts and evidence relevant to these propositions.

It is essential that a study in an area with as many points of controversy as personality include working definitions of the terms and concepts of which it makes use. Accordingly, in the following theoretical discussion, a number of such terms will be defined in footnotes with the following three criteria in mind: (a) The definition must be in close accord with at least one set of currently accepted concepts and evidence. (b) Modifications in the accepted versions must not result in their distortion but should serve to make their application to the present problem more readily discernible.



(c) Once the definition is made, it must not be used thereafter in this report in any other way than the stated definition allows.

The gathering-together of complex anthropological findings on individual cultures for comparative study by writers such as Ruth Benedict, Linton, Kroeber, Margaret Mead, Malinowski, has established that each culture<sup>1</sup> has its own patterns of social expectation for what it considers appropriate behavior for each of its member-individuals. Further, it was found that as each culture varies in its social expectations and trains its children to conform to them, the personalities of the members of each culture vary correspondingly. Also, the social expectations for the individual within a society<sup>2</sup> were found to be by no means uniform. Rather, these varied with his assigned social rôle<sup>3</sup> which was based on his age, his sex, the social status

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<sup>1</sup>*Culture*: A society's ways of behaving are formulated in its folkways, mores, value-systems, and institutions—ways of behaving which are passed on from one generation to the next. These socially-defined ways of behaving or "culture patterns" tend to inter-relate with one another so as to form a coördinated pattern of social living typical for a stated social unit or society—that is, society may be termed the form, culture the content. It is this coördinated overall pattern of social behaviors which identifies one society as a unit distinct from other societies, and which, for this study, will be regarded as a "culture."

<sup>2</sup>*Society* is here taken to denote an interacting aggregate of individuals, spatially located, whose interactions occur according to a framework of relationships. The systems of social relations as practiced within this framework, although differentiable, are interlocking and interdependent to varying degrees. These *systems of social relations* (equivalent terms: social group, social structure) may, for the purpose of social analysis, be treated either as identifiable entities—separate social structures—or as interacting variables within a total configuration. The family is one example of such a system of social relations, the peer group is another, the school is another. The tendency in this study will be to consider such a system of social relations within a society as an identifiable, analyzable social entity, rather than as an interacting variable making up and affecting that total social configuration which is society.

<sup>3</sup>*Social Rôle*: Society has been defined as an aggregate of individuals interacting in accordance with a framework of relationships. Each system of social relations within this framework provides a number of positions or statuses for its various members, with different degrees and kinds of prestige assigned to each status by society. Society ascribes a complex of attitudes, values, and behaviors to each of these statuses, which the person who occupies a particular status is expected to assume. This complex of culture-patterns assigned to a given status is one's expected social rôle. Most cultures, however, recognize limited degrees of variance in social rôles; complete rigidity is characteristic of only a few.

The rôles which individuals in a social group assign one another, then, depend partly upon the behaviors and pattern of relationships which the particular group gives to each participating member and partly upon the ways in which the individual's needs allow him to assimilate and lead him to modify his assigned rôle (the "*individual social rôle*"); both are aspects or factors in social rôle. The term is used here essentially in the societal rather than the individual sense: the assignment by social groups, such as the family, peer group, social class, of a social rôle to each of its members, provides for the individual a certain uniformity of social experience within that social group.

Since the individual participates simultaneously in a number of social groups

level into which he was born, and his place in the particular social group with which he was interacting, such as the peer group, family, social status group. Such cultural expectations and training therefor provided the individual with a certain uniformity of social experience.

One of the major areas of study of the effects of a clearly-defined social rôle on the personalities of a social group has been in the area of sex-rôle.<sup>1</sup> Margaret Mead's studies, in particular, have shown that societies assign a different social rôle to each sex, that the uniformity of social experience along sex-differentiated lines produces sex-typical personalities within a culture, and that these sex-typical personalities vary from culture to culture as the sex-rôle expectations and training therefor vary.

Miss Mead's well-known study, *Sex and Temperament in Three Primitive Societies* (55), as an example, has documented the apparently direct relationship between culturally-approved patterns of behavior for each sex and the "typical" male and female personality for that culture. She found in three closely neighboring (but non-communicating) New Guinea tribes three very different sets of sex-typical personalities: (a) Both the Arapesh man and woman were typically unaggressive, coöperative, affectionate, concerned with the proper upbringing of their children, with sex not a powerful drive in their lives—aspects of the generally-accepted feminine rôle of our culture. (b) Both the Mundugumor man and woman were typically aggressive, active, competitive and vindictive, little interested in their children's welfare, positively sexed—aspects of the generally-accepted masculine rôle of our culture. (c) The Tchambuli man played the passive rôle in the love-making patterns, was vain, jealous of other men, unsure of himself, the stay-at-home: aspects of the feminine rôle of our culture. The Tchambuli woman, on the other hand, took the dominant and favors-giving rôle in

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(systems of social relations), he will simultaneously be assigned a number of (usually interrelated) social rôles, one for each status he occupies within each system of relations in which he participates. His social rôle will as a result vary for each system of relations; it is George Mead's theory that personality development consists essentially of the individual's inner process of integration of these varying rôles.

<sup>1</sup>*Sex-Rôle*.—Sex is one of the three (class, age, sex) societal variables which cut across or segment all social structures within a society. However, a social class, similar age-group, or similar-sex group are in themselves differentiable social groups. Society assigns each of the sexes a social rôle *which is by no means identical with their respective biological rôles* (as anthropological studies have established) *but includes the biological rôle as one of its components*. Each culture (or sub-culture) defines for itself what the respective social rôles of the sexes are and how that social rôle shall allow for or incorporate biological rôle. This social rôle which society assigns on the basis of sex is the individual's sex-rôle. Hence, by definition, the individual has a uniformity of social experience along sex-differentiated lines.

ove-making, was possessive towards her mate, was impersonal, managing, the active bread-winner: aspects of the masculine rôle of our culture.

In each of these cultures, the respective sex-rôles were considered to be the appropriate ones for each sex and girls and boys were trained from earliest years to conform to them.

Limited deviations from the "sex-typical" cultural stereotype have been found to be permissible in most "simple" societies studied by anthropologists (66). In a more complex society such as ours, where class and ethnic groups may be considered sub-cultures,<sup>5</sup> there may be variation in the approved personality stereotype from sub-culture to sub-culture.

These findings, together with the results of numerous biological and psychological experiments on the nature of learning, have established that the individual's social behavior, which biologists, psychologists, and philosophers of our western culture had long termed "instinctual" or innate, was in actuality learned behavior—behavior patterns passed on from generation to generation through social conditioning within our particular culture.

Current theories on personality development represent, however, some kind of integration of these two apparently opposed schools of thought: that may be termed the "biological viewpoint" *vs.* the "sociological viewpoint." The "biological school" laid stress on the "inherent nature" of the human animal as the key factor in personality; it is man's need to satisfy his "instincts" or "basic drives" which leads him to behave in the ways he does. The different stages of personality development are due primarily to physical and therefore instinctual maturation factors, especially of the sexual drive, and to the extent to which man's social relations satisfy or thwart his instinctual drives as they develop. Living is visualized as a constant struggle between individual demands and societal demands. McDougall, Freud, and to some extent Gesell, represent the "biological viewpoint."

The "sociological school" on the other hand, emphasized the rôle which cultural expectations play in the formation of personality. Each child was seen as nothing more than a bundle of capacities and potentialities at birth; it is his social experiences which give these potentials form and expression. The organism is merely the form or mold which contains the personality; social learnings provide that content. The social group is prior to the individual and it provides clear-cut conceptions of the kinds of behavior it expects

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<sup>5</sup>*Sub-Culture* is here used to refer to a specific group within a culture which has culture patterns distinctive of itself (as well as sharing in the overall cultural patterns).

of each individual. Each child is thus born into a structured situation which determines most of his social experiences from the moment of his birth. His behavior is approved or disapproved, rewarded or punished, in accord with its degree of conformity with social expectations. By such "social conditioning" (*viz.* Miller and Dollard's "Social Learning Theory") (56), the individual is trained to conform to the behavior patterns set for him by his culture at the various age levels. "Growing up" thus involves learning to channelize one's basic drives into the expression-channels provided by society.

Since each person participates simultaneously in several systems of social relations, he has an equivalent number of social rôles to learn. In early years, the child learns each of his rôles through social interaction as he comes to perceive and to participate in the various relational systems: family, peer group, school, church, community. Personality development or maturation consists of this process of learning the various social rôles assigned by society and of integrating them into a balanced personality structure (52). Culture patterns would thus seem to be omnipotent and inexorable: each child is turned out a rubber stamp of his social environment. Apparently social change could occur only through the introduction of extraneous factors into a society.

The biological theory, on the one hand, overlooks the rôle culture plays in determining the ways in which basic drives may be expressed (or not expressed): cultural patterns can and do drastically modify the expression of physiological needs by channelizing them into approved channels. The sociological theory, on the other hand, attributes an overly-static rôle to the individual organism: it tends to overlook the dynamic components of personality which stem from the individual's particular pattern of needs, his inner reaction to, picture and organization of his social experiences, and the extent to which such reactions can lead him to modify his social environment, either by acting back on that reality itself or by creating his own idiosyncratic picture of social reality or both.

Current personality theories give a place to both the organic and the social factors in personality development as the preceding paragraph has outlined. Unfortunately, however, there appears still to be a cleavage in approach, but a cleavage of a different nature. It seems to derive from the "point of reference" taken by the particular theorist or researcher involved: social-individual inter-relationships, or inner processes.

Thus, what may be termed the social-psychological approach is concerned with the relationship between the individual's social experiences and the

personality characteristics he develops, while what may be termed the theoretical and the clinical-psychological groups, as represented by Gardner Murphy, the Neo-Freudians, and Carl R. Rogers respectively, treat social experience as part of the organism's raw sensory data of perception and are concerned with the inner processes by which all its sensory data, physiological, physical, social, are organized into a coherent personality.

In spite of this split, the essential tenets of George Mead's theory of personality development already briefly outlined, stand up well—in fact, recent evidence accruing from the research on therapy carried on by Carl Rogers and his students seem to be “filling in” some of the internal, dynamic concomitants of Mead's theory (65). If we modify Mead's theory by attributing to the individual organism greater capacity to select its particular social experiences and to react back on its social environment, we would seem to have as adequate a formulation as our present knowledge allows.

Davis and Havighurst's formulation (16) that personality can best be studied in terms of two basic interacting systems of behavior, which are somewhat analogous to the two possible definitions of social rôle given *supra*, seems to provide the suggested modification of Mead's theory. These two interacting systems of actions, feelings, thoughts are seen as: (a) The cultural, learned by the individual from his basic social groups: family, age-group, sex-group, social-class group, etc. (b) The individual, derived in part from unique genetic factors, in part from learning factors, and made up of responses to organic, affectional and chance factors, including deviation of a child's training from the standard cultural norm of this group. This formulation has been derived from extensive investigations of the effects on children's personalities of the various child-rearing methods practiced by different class and ethnic groups.

From this formulation, and the anthropological evidence presented, we may postulate that commonality of social experience among individuals should result in two types of personality characteristics within each individual: those shared in common with others of his social group and those which are individually unique. This study makes use of this definition and assumes that there are culturally-derived components of personality, that is, those which are shared in common with others of the same social group, and will interest itself primarily in these aspects of personality.

It should be recognized that anthropological data concerning the relationship between social-training patterns and personality, as cited so far, have tended to lean heavily toward describing the overt or socially-observable aspects of personality. The individual's inner emotional and mental re-

actions to his social experiences, to his assigned social rôle, to himself in relation to his social world, to others in relation to himself, to himself as such, are not emphasized. The lack would seem to be due to two circumstances: one, that anthropologists until recent years were not aware of the necessity for obtaining such data; two, psychological techniques suitable for discovering the covert, dynamic aspects of personality have been developed only recently.

A limited but increasing number of cultural and group studies, in which such inner aspects of personality were investigated through the medium of projective techniques, are showing an essentially similar kind of relationship between social-training patterns and inner personality characteristics (15, 35, 71). The relationship does not appear to be as direct a one as in the case of the overt aspects of personality: each individual has his own characteristic patterns of inner response. However, when the "inner lives" of groups of persons with similar intra-group but different inter-group training were compared, uniform intra-group similarities and inter-group differences were found (35). It is essentially this procedural approach which is utilized in this study. In spite of individual uniqueness, it would seem that one human animal is sufficiently like another human animal to react with similar emotional and mental patterns when both have been subjected to similar social stimuli applied over a period of time.

Projective techniques may be briefly described as psychological tools whereby an individual is induced to reveal more of the covert components of his personality traits than he ordinarily shows in his physical and verbal behavior (34). Such techniques provide a "free" stimulus situation which is highly provocative of response and which forces a minimum of external structuring on the individual's responses. It is assumed that the tested person's responses represent a projection of (*a*) his own inner emotional world, (*b*) his private conception of the world about him, (*c*) the kinds of efforts he makes to relate himself to what he conceives to be reality. In so projecting, he is objectifying "those tendencies and determinants of the personality which characterize the individual's private world of meanings and which are motivating of his behavior and expressive movements, of his verbal and artistic productions" (34, p. 2).

The normative problem in regard to the interpretation of projective techniques is operative in this study. What does it mean when a person is characterized as having "poor ability to organize mentally," or as having a "high level of anxiety"—"poor" with regard to what standard, "high" with regard to what standard? This kind of question cannot be answered

as unequivocally by a projective test as it can by a psychometric test; however, what is lost in the interim (until further research leads to a more and more exact answer) by a less than completely objective interpretation, is, in the opinion of investigators in the field of personality, more than compensated for by the richness and coherence of the personality data that the use of projective techniques provides.

With tests whose increasing usefulness depends on the "possibility of perfecting the interpreter more than it does in perfecting the material" (60, p. 6), the idea of norms is essentially operative within the interpreter rather than in the test itself. The well-trained and experienced projective-test interpreter has two notions of a normative nature in mind when he approaches a test record:<sup>6</sup> (a) Through his theoretical orientation and extensive diagnostic experience, he has a clinical idea of what constitutes an adequate personality. That is, he judges the individual's functioning both in the light of what the subject's actual potentialities are and in the light of what is generally considered healthy personality organization and functioning for that individual's level of development. (b) The latter consideration, that of a healthy personality *per se*, is also approached by the interpreter with a socially-oriented criterion in mind: he makes use of the concept of "social normality," which implies that the individual is adjusting adequately to some social group without excessive anxiety and cost to himself.

Hence, qualitative personality judgments of a comparative or "degree" nature are primarily made on the basis of how the tested individual compares with his own potential, rather than on how he compares with other persons.

A number of studies undertaken during recent years in the longer-settled areas of our country by Warner and his students have shown that the concept of social class in the United States is something far more complex than merely economic groupings; that, indeed, a social class has many of the characteristics of a sub-culture in the anthropological sense (14, 18, 49, 70). These studies were on entire communities and used the open-interview method of obtaining basic data, interviews which allowed every adult individual in the community to place on the social scale his fellow-residents, and in so doing, himself.

Warner's study of Yankee City will here be used as the basis of discussion. Income level proved to be only one of the many factors which were found to enter into an individual's neighbor-assigned place on the social scale. Some of the social factors so discovered could be construed as closely

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<sup>6</sup>This statement is derived from B. Klopfer and D. M. Kelley, *The Rorschach Technique*, and from verbal communication with W. E. Henry.

related to income level, such as the part of town in which the person resided, the kind of house (and grounds) in which he lived, whether he owned or rented it, his amount of education, whether his income came to him through fees, salary, weekly or hourly wages, welfare assistance. But more subtle factors, such as the church attended, the public and private recreational patterns, the public social behavior, taste in home furnishings, the length of time the individual's family had been resident in the community, the social clique associated with publicly and privately—in short, how and on what things income is spent, the social behavior patterns and associations, a whole system of value-attitudes—were the final arbiters of social status. According to these standards of judgment, two families at the same yearly income level could be placed as far apart socially as lower-middle-class and lower-upper-class (on the scale evolved from the community data). The "nouveau riche" quickly find that there is much more to social mobility than a rise in income: they must learn to spend it and to behave socially in ways acceptable to the group they wish to be identified with—and to keep on trying for some time. Often, not they but perhaps their children accomplish the jump—if they train them appropriately and establish the "right connections" for them.

From the data of these studies, the following six classes were distinguishable in the longer-settled areas of the United States:

1. *Lower-lower (LL)*: Income sporadic, usually receives some public relief, unskilled labor occupations, little education, money is seen as something to be spent and not saved, live in slum areas, uninhibited sexual and social behavior, lack of adherence to and belief in accepted (middle class) social patterns, no formal associations.
2. *Upper-lower\* (UL)*: Income through wages which are sometimes sporadic, trained in the semi-skilled trades and low-paid clerical jobs, money is seen as something to be saved and spent carefully, live in marginal areas but some attempt made at house or apartment maintenance, some formal associations, little education, church allegiance is often close, respect for and attempt to imitate the social patterns and value-attitudes of the next higher class, often the determining factor in which of the two lower classes an individual is placed hinges on whether or not he strives for middle-class values and behavior and displays "social responsibility."
3. *Lower-middle\* (LM)*: Income from wages, salary, or small business, regular, training in skilled trades or lower-paid professions, money is a symbol of status and actively striven for, live in small, well-kept houses or apartments in monotonous but clean areas, close church allegiance, acceptance of and active following of the external social patterns of the next higher class; "keeping up with the Joneses" is the dominant value of the socially-mobile of this class.



4. *Upper-middle (UM)*: High income from salary or fees or large business, trained in the more highly-educated professions and managerial positions, live in choice residential areas, houses or apartments large and well-kept, self-conscious of their personal reputations, status in and value to the community, extensive formal associations of the help-your-community type, represent to the community the virtues of hard work, private property, high morality and self-discipline, aspirations towards the "cultured" life.

5. *Lower-upper (LU)*: Level and source of income, as well as value attitudes, similar to the class below, but private property and dividends are also a source of income, family has resided in the community for at least two generations, large palatial homes in landscaped grounds, community participation on the charity-board and fund-donation level, sponsors of the "cultural" activities in the community, highly "exclusive" association patterns, the "new aristocracy."

6. *Upper-upper (UU)*: Similar level and source of income to the two classes below, but are very old families, who feel that "our families have always been the best people," little community participation except as social symbols of stability on important local and national occasions, many live on country estates outside the community and travel abroad a good deal, symbolizing their social distance, see themselves as "top of the heap" and the arbiters of their own social and private behavior.

The different social classes have here been described primarily in terms of their differences. However, since they all exist within the overall cultural framework of American society, they also *share* certain characteristics, particularly the "adjoining" classes on the scale: there is not necessarily a clear-cut dichotomy between two such classes on all major class-differentiating characteristics; indeed, they may be closely similar on certain characteristics. Examples of such a situation are the *UL* and *LM* classes, starred above. Even as above described, they show similarity in their social value-systems, just as the *LU* and *UU* classes are similar in their source and level of income. Warner has pointed out that while the *UL* and *LM* classes are closely similar in their social values, the *LL* class as compared with the *UL* class is not, nor is the *LM* class in comparison with the *UM* class (73). For this reason, as well as the circumstance that the *UL* and *LM* classes together constitute approximately 70 per cent of the population of the United States, Warner has designated these two social classes taken together as the "Common Man" social level (71). The sample of children used in this study were drawn from this population group.

Three estimates of the percentage of population in the various class groups are given in Table 1 as a reference point: the first is that for the entire

TABLE 1  
PERCENTAGE OF THE POPULATION IN THE SIX SOCIAL CLASSES

Social Class	United States	Yankee City	Midwest
Upper-upper	2%	1.44%	3% (rounded)
Lower-upper		1.56	
Upper-middle	8	10.22	11 (rounded)
Lower-middle	30	28.12	31 (rounded)
Upper-lower	40	32.60	41 (rounded)
Lower-lower	20	25.22	14 (rounded)
Unknown	—	.84	—
Total	100%	100.00%	100%

United States, as derived from 1940 Census data by Carson McGuire of the Committee on Human Development; the second is that of Yankee City (70); the third is that of "Midwest," the midwestern community which is the home of the sample of children used in this study (72).

A scale of social status, the Index of Status Characteristics (I.S.C.), has been derived from the community data described above, by Warner and his associates (72). Although the I.S.C. is based on a combination of four objectively ascertainable variables closely related to economic factors: area lived in, house type, occupation, source of income, its use can predict the community-evaluated status of two families with, for example, the same income level, to be as far apart socially as the lower-middle and upper-upper classes. To measure a family's social status, the family is rated on each of these four characteristics on a 7-point scale, and the average of these four ratings obtained. The higher this average rating, the higher the family's social class status. An I.S.C. rating between 3.4 and 5.6 places a family in the upper-lower and lower-middle classes (the Common Man grouping).

A number of studies in recent years which have accepted the premise that a social class may be approached for study as a sub-culture are accumulating evidence corroborative of this assumption. Parent-child and peer-group relationships have so far been the focus of these studies. The investigations of Davis and Havighurst (16), Ericson (21), Neugarten (61) have shown marked class differences in child-rearing practices and in the social behavior of children. Duvall has discovered differences in attitudes toward parenthood on the part of parents of various class and ethnic groupings (19).

The chain of evidence now contains all its essential links. We have seen that: (a) Anthropological studies have established that there is a direct relationship between a culture's social training patterns and the personalities of the members of that culture. (b) The culturally-differentiated social rôle of males and females (their sex-rôle) produces a masculine and

a feminine personality typical for that culture. (c) Both individual and social factors are operative in the development of the individual personality. The development of projective techniques has enabled investigators to discover that covert personality characteristics are also affected by cultural training patterns. (e) American society is structurally divisible into a number of social classes, each of which has many of the characteristics of a sub-culture even while it shares characteristics in common with other social classes. (f) The development of the Index of Status Characteristics has made it possible to determine the social class status of a family, given certain objective evidence. (g) Studies which have utilized the anthropological approach to social class have shown that there are definable cultural differences in child training and social behavior among the American social classes.

It is, accordingly, hypothesized that the social class and sex-rôle training of a group of early-adolescent girls and boys of the Common Man social level has led to their development of a personality constellation typical of the entire group, and of personality constellations typical, respectively, of the boys and the girls as sub-groups within the total group.

## II. THE DATA

This investigation is based on extensive and intensive case-study materials on 30 children, 15 girls and 15 boys, studied from the ages of 10 to 14 (1942-1946). These materials were gathered, analyzed, and interpreted as part of the Midwest<sup>7</sup> Research Project conducted by the staff of the Committee on Human Development of the University of Chicago. The purpose of the study was to investigate character and personality development during later childhood and adolescence. A series of publications on the results of this study are in the process of preparation. This project will hereafter be referred to as the "character study."

The original sample of children chosen for this group-research project consisted of all children residing in 1942 in the small city of Midwest who had been born in the year 1932, 149 children in all.<sup>8</sup> Beginning at the age of 10 in 1942, these children were examined physically and given a number of psychometric, sociometric, and other specially-formulated tests at intervals throughout the study. Early in the project, 36 of these children were selected from their total age-group for intensive study. These 36 children were given certain additional intelligence, aptitude, and personality tests (including projective tests), and they, their parents and their teachers were interviewed at intervals throughout the study.

These 36 children compare with their total age-group on the two variables of social-class status and sex distribution as shown in Table 2. They

TABLE 2  
COMPARISON OF THE "CHARACTER-STUDY" GROUP WITH THEIR AGE GROUP ON SEX AND SOCIAL STATUS

Selection variable		Age group		Intensively-studied Group	
		Number	Per cent	Number	Per cent
Sex	Boys	55	46	18	50
	Girls	65	54	18	50
	Total	120	100	36	100
Social class Status	Upper	—	—	—	—
	Upper-middle	3	3	1	3
	Lower-middle	24	20	9	25
	Upper-lower	72	60	21	58
	Lower-lower	21	17	5	14
Total		120	100	36	100

<sup>7</sup>Name fictitious.

<sup>8</sup>This number fluctuated from year to year and from test to test because some children left the community (and were not replaced by others who may have come in) and others were absent from school at the times a particular test was given.

were originally selected on the basis of being "adjusted" and "unadjusted," as defined by the following composite criterion: The "adjusted" boys and girls were judged to be those who received scores in the top quarter on at least three of the following measures: Reputation Ratings (Item 22 below); Sociometric "Who's Who in Our Group" (Items 26a below); California Personality Test (Item 15 below); Field Worker's Social Adjustment Rating and Social Development Rating. Ten girls and seven boys were selected for intensive study as "adjusted" on this basis (the original tentative "adjusted" listing contained 16 girls and eight boys).

The "unadjusted" boys and girls were judged to be those who received scores in the lowest quarter on two or three of the five above-itemized measures, as well as receiving a number of the following kinds of scores: high uncertainty score on the Chicago Interest Inventory (Item 17 below); high dislike score on the same instrument; high aggressive score on the same instrument; the field worker's opinion that the child was "unadjusted"; teachers' opinions that the child was "unadjusted"; school achievement two quartiles below tested ability. Seven girls and 10 boys were selected for intensive study as "unadjusted" on this basis (the original tentative "unadjusted" listing contained 11 girls and 15 boys). A boy and a girl were added later from the "middle" range.

The results of the subsequent thorough case-study of each of these children cast a good deal of doubt on the adequacy of these selection criteria. The projective techniques, in particular, revealed every shade of "adjustment" and "unadjustment" in each of the two groups selected as "adjusted" and "unadjusted," in terms of the projective techniques interpretive criteria given in the first chapter. The impression grew among the research staff that the selection criterion had in actuality been more of an index of social conformity than a measure of psychological adjustment or unadjustment.

It was not believed necessary to test these impressions statistically at the time the writer's study was undertaken, since she proposed to investigate an area which was unrelated to the purposes of the original study. It was therefore assumed that the described selection procedure had not biased the data for the purposes of the current study. However, the later derivation of a constellation of group-typical personality characteristics raised the issue of the age-group representativeness of the sample used in this study. This question will be dealt with in Section III in connection with the presentation of the group-typical personality constellation.

Each child had been assigned a code number for purposes of anonymity. This code number was prefixed by the letter "T" for "10-year-old," as T-2,

in order to distinguish these cases from the "S" series of cases, a group of 16-year-olds from the same community who had been studied by the Committee on Human Development a few years previous.

Nine kinds of data, representing the results of 29 instruments, were included in each of the 36 case-studies, as listed below. The instruments numbered 16 to 21 inclusive were developed especially for the character study and are described briefly.

#### *Interviews*

1. By field workers, with the child, his or her parents, teachers, others in the community.

#### *Psychometric Data*

- 2 to 14. Intelligence, aptitude, achievement tests: Revised Stanford-Binet, Forms *L* and *M*, Primary Mental Abilities, Otis, Bellevue-Wechsler, Cornell-Coxe; Iowa Silent Reading, Minnesota Paper Form Board, Chicago Assembly, Minnesota Assembly, Porteus Maze, Metropolitan Achievement, Stanford Achievement; school rank and average grade.

#### *Subject's Reports: Checklists*

15. California Personality Test.
16. Family Relations Questionnaire: Divided into 10 areas of questions which were thought to be revealing of affectional family relationships, areas such as degree of approval-disapproval, confidences shared, interparental tension, child's acceptance of home standards, etc.
17. Chicago Interest Inventory: Questioned whether the child liked, disliked, was indifferent to or uncertain about, activities classified into 11 areas such as sociability, acceptance of impulse, aggression, fantasy, family, etc.
18. Strength of Conscience Questionnaire: The child was asked to indicate "How Bad Is It" (very, very bad, bad, not good and not bad, all right) if a boy or girl his age did a listed number of "bad" things. He was also asked "How Would You Feel" if "you" did a number of "bad" things. The numerical difference between the score on the first section and the score on the second section was taken to indicate "strength of conscience."

#### *Subject's Reports: Free Response*

19. Emotional Response Test: The child was asked to indicate, anonymously, three things that had made him happy, sad, afraid, angry, ashamed, as well as the best thing and the worst thing that could happen to him.
20. Bavelas' Moral Ideology Test: Designed to get information on the child's "official" moral ideology and on the surrogates who reward and punish for good and bad behavior. The child was asked to write down three things a boy or girl of his age could do which would be good things to do and which would be praised and approved.

He was also asked who would praise or blame the boy or girl for doing these three things. The same procedure was followed for three bad things.

21. Essays: The children were asked to write compositions on such topics as the following: A Perfect Saturday, The Person I'd Like to Be Like When I Grow Up, Three Wishes.

#### *Ratings*

22. Reputation Ratings (Criterion Scores) by adults and age-mates.

23. Behavior Ratings, by the child's teachers.

#### *Projective Techniques*

24. Thematic Apperception Test, sequence analysis and summary.

25. Rorschach Test, sequence analysis and summary.

#### *Sociometric Data*

26. Analysis of (a) Character Guess-Who, Who's Who in Our Group, Social Personality Guess-Who, etc. (b) Friendship Sociogram.

#### *Physical Data*

27. Anthropometric measurements, health and energy ratings, anecdotal reports.

#### *Clinical Case Conference Summaries*

28. Clinical Conference Summary No. 1, consisting of the *presentation* of the data from the above instruments according to the Conceptual Framework discussed and reproduced as an appendix in the original thesis copy, and the record of the staff discussion thereon.

29. Clinical Conference Summary No. 2, consisting of the *interpretation* and *evaluation* of the data presented in Summary No. 1, also according to the conceptual framework already referred to.

The procedure for presenting and analyzing these data for each child involved seven steps on the part of the research staff.<sup>6</sup>

The completed file folder for each child contained all the above-described materials. It is important here to note that the present study would not have been possible without such a rich source of interdisciplinary data: one researcher could not have begun to collect as extensive and as complete information, nor could one person possess as many techniques and skills to as high a degree as were represented by the personnel of the research staff, several of whom are recognized authorities in their particular fields.

Thirty of these 36 intensively-studied children were selected by the writer for her investigation according to the following considerations: (a) The

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<sup>6</sup>The writer was a research assistant with this project from October, 1946, to June, 1947.

children must represent a homogenous social group. In order to include the largest sample possible, it was decided that the social status of the children selected should be what Warner has termed the "Common Man" grouping: the lower-middle and upper-lower classes. This first selection yielded 16 girls and 14 boys. (b) Since it was preferable for statistical purposes to have an equal number of boys and girls, one of the *LM* class girls was eliminated on the basis that the value-system in her home was far more typical of the *UM* class than the *LM* class (her mother was the only mother of the *LM* group who was a college graduate and behaved like it at home and in the community). One of the *LL* class boys, T-72, was added, both because of his mother's emphasis on middle-class values and behavior in the home, and because of his being the only one of the original group of children ranked as *LL* in social class status to be at his age-grade level in 1946. He was, in addition, highly popular with his peer group and actively participated with them.

Both these selective procedures, as well as the possible effects of the original selection on the basis of "adjustment" and "unadjustment," will require testing by analysis of the study's results. If the findings reveal a "no" answer to the following three questions, it would appear that the selection procedure was valid. (a) Are there any consistent or pattern differences between the *LM* class and the *UL* class children so selected? (b) Does the *LL* class boy, T-72, show up as a lone deviate from the other boys? (c) Do the children rated as "adjusted" and "unadjusted" show any tendency to cluster into "alike" groupings?

The boys and the girls are compared with one another on several variables, both as a means of describing the children further and because these comparisons are pertinent to certain later aspects of the study. Table 3 gives their social status, as derived by application of the Index of Status Characteristics. Table 4 gives their *IQ*'s on the Revised Stanford-Binet, Form *MI*, administered in the Spring of 1946. Table 5 presents the sexual maturation status of the 30 children, as of Spring, 1946. Table 6 shows which

TABLE 3  
SOCIAL CLASS STATUS OF THE 30 CHILDREN OF THIS STUDY

Status	Girls (N: 15)	Boys (N: 15)
<i>UL</i>	T-1, T-3, T-7, T-10, T-12, T-29, T-33, T-38, T-67, T-75, T-84	T-14, T-36, T-39, T-53, T-58, T-66, T-89, T-92, T-97, T-105
<i>LM</i>	T-2, T-56, T-78, T-99	T-26, T-28, T-45, T-90
<i>LL</i>		T-72



TABLE 4  
REVISED STANFORD-BINET RESULTS: COMPARISON OF THE GIRLS WITH THE BOYS

Girls		Boys	
Case	IQ	Case	IQ
T- 1	126	T- 14	107
T- 2	111	T- 26	109
T- 3	116	T- 28	113
T- 7	125	T- 36	118
T-10	107	T- 39	119
T-12	113	T- 45	115
T-29	112	T- 53	122
T-33	127	T- 58	100
T-38	84	T- 66	88
T-56	125	T- 72	107
T-67	99	T- 89	123
T-75	114	T- 90	139
T-78	116	T- 92	113
T-84	114	T- 97	117
T-99	113	T-105	126
(Arithmetic) Mean	113.47	(Arithmetic) Mean	114.40
Mean Deviation	7.37	Mean Deviation	8.44

TABLE 5  
SEXUAL MATURATION STATUS OF THE 30 CHILDREN, AS OF SPRING, 1946\*

Sex	Post-pubescent or post-menarcheal	Menarcheal or Pubescent	Pre-menarcheal or pre-pubescent
Girls	T- 2, T-99, T-56 T- 1, T-10, T- 7 T-12, T-78	T-67, T-29	T-75, T- 3, T-33 T-38, T-84
Boys	T-92, T-36, T-53 T-26, T-45, T-66	T-39, T-72, T-90 T-14, T-28	T- 89, T-97 T-105, T-58

\*Data for this table were obtained from the following sources:

1. For the girls, based on information given by the girls themselves during the course of a series of counseling interviews with a trained worker, in Spring of 1948.

2. For the boys, based on information given by the school's athletic coach. He utilized his personal observations in rating the boys on the three-point scale of pre-pubescent, pubescent, and post-pubescent.

TABLE 6  
THE STUDY SAMPLE'S RELATIONSHIP TO THE SELECTION VARIABLES OF "ADJUSTED" AND "UNADJUSTED"\*

Sex	"Adjusted"	"Unadjusted"	"Middle Range"
Boys	T-26, T-36, T-53, T-72, T-89, T-97	T-14, T- 28, T-39, T-45, T- 58, T-90, T-92, T-105	T-66
Girls	T- 2, T- 3, T-10, T-12, T-29, T-33, T-56, T-84, T-99	T- 7, T-38, T-67, T-75, T-78	T-1

\*See p. 248 for a discussion of these selection variables.

of the children were selected as being "adjusted," "unadjusted," and in the "middle range," as described above.

Here were available, then, extensive and complex data, but data which had been gathered, analyzed, and conceptualized with a different end in view than that of the present investigator. The basic procedural problem was, thus, one of analytic method: how could these data be (a) broken down, and (b) re-conceptualized, without distorting the data themselves or drastically modifying the present hypothesis?

The writer's method of approaching and solving this problem constitutes the content of this and the two following chapters.

The procedural approach was an empirical one. That is, the analytic procedure of one step was directly dependent upon the findings discovered by the analytic method utilized in the previous step. This closely interlocking progression meant that material revealed in the later stages of the data analysis could not be anticipated in the earlier stages: these were revealed only as the analysis progressed.

Therefore, to present the analytic procedure as one independent unit and the findings as another independent unit, as is the usual convention in dissertations, would create an artificial dichotomy. To prevent such an unnecessarily artificial approach, the writer proposes: (a) To describe in a general manner the procedural methods used (the present chapter). (b) To present in detail the initial method of organizing and analyzing the data to the point of the discovery of sex-typical and group-typical personality characteristics (Chapter III, Steps 1 to 8). (c) To describe the reliability procedure adopted and to present its results (Chapter IV, Step 9). (d) To explain how deviant-from-the-group children were discovered and to report on the investigation of this deviance (Chapter IV and Chapter VI, Steps 10, 11, 12).

The first problem faced was that of how to transcribe data collected with a *different end in view* into a form suitable for the purposes of the present study, without distorting the original material in doing so. Directly related to this problem was the second one: how could the personality data be so arranged that the material for each child would be directly comparable to that for every other child? Both of these problems were solved by empirically deriving an outline, the "preliminary personality framework," and transferring into this framework the relevant data for each case from the clinical conference summaries.

The next problem faced was how to compare the personality characteristics of the girls as a group with the personality characteristics of the

boys as a group. This problem was handled in the following manner: The data in these 30 preliminary personality frameworks were broken down into as extensive a listing of personality traits as the material itself yielded. A check-list or basic data sheet was set up, wherein every trait so derived was listed vertically down the left side and every child was listed horizontally across the top. The transposed data for each child were searched for a statement concerning the presence of each listed characteristic. If such a statement was present, the corresponding "box" was checked; if it could not be found, the box was left blank.

Upon completion of this operation, the number of girls possessing each characteristic was totalled, as were the boys. These totalled figures were then tested to discover whether or not the differences between the number of each sex possessing each trait could be attributed to chance or not through the application of the chi-square statistical technique.

This preliminary analysis of the material yielded not only a number of sex-typical traits sufficient to warrant the continuance of the investigation, but also showed a number of group-typical traits of an interesting nature.

It was recognized that adequacy and accuracy in regard to such derived data as made up the clinical conference summaries was a problem. Accordingly, the entire basic data sheet was rigorously re-checked, before its reliability was tested, by referring back to the results of the relevant original instrument; that is, it was assumed that error or oversight could have sufficiently affected the material in the clinical conference summaries to warrant going back to the original instrument results on which the summaries were based. A second "chi-square" was applied to the re-checked data-sheet; it is the results of this second statistical operation which form the basic findings of this investigation.

A further problem was that of the reliability of the writer's judgments regarding each child's possession or lack of possession of each specific trait. The procedure for testing the reliability of the investigator's judgments involved the derivation of the five "most typical" boys and the five "most typical" girls. Two judges were given the file folders of these 10 children and were asked to rate each of them on their possession or lack of possession of 39 traits.

The "table of typicality" which was used to derive these 10 "most typical" children revealed certain regular patterns of deviance from the major grouping on the part of some of the children. The last step in analyzing the data was an attempt to discover the factors associated with these patterns of typicality and deviance by comparing the typical and deviant groupings with a number of possibly related variables.

### III. THE DERIVATION OF THE SEX-TYPICAL AND GROUP-TYPICAL PERSONALITY CONSTELLATIONS

As has already been described, the material which formed the "raw data" of this study was derived from case conference summaries Nos. 1 and 2, whose contents have been discussed in Section II. The derivation of the basic findings of this study from these data involved eight procedural "steps."

*Step 1: Deriving the preliminary personality framework.* As has been pointed out, the conceptual framework into which the case conference summaries were cast had been arrived at with a research purpose in mind different from that of the present researcher. Nevertheless, the beginning data essential to the study were present in the summaries, even though in a not directly applicable form. The first task, therefore, was the empirical working out of a "preliminary personality framework" on the basis of two criteria: (a) Its form must organize relevant data in a manner useful to the present study. (b) It must not distort in any way the pertinent data selected.

By a process of empirical trial and error—deriving an outline from the two summaries of one case, going through another case, modifying the first outline, going through a third case and a fourth case and modifying the outline each time—a "preliminary personality framework" into which all pertinent data for all 30 cases could be transferred was derived (Table 7).

It should again be made explicit that the headings were derived from the data themselves—that is, from the attempt to include all data relevant to personality in case conference summaries Nos. 1 and 2 for four cases, two boys and two girls. The form of the character study's conceptual framework of necessity affected the kinds of personality characteristics available; the approach to inner life functioning and its relationship to outer behavior, here allowed to be implicit, is essentially that of W. E. Henry, whose field of specialization is in projective techniques and who has published his views on the study of the covert aspects of personality (35). The two columns of the personality framework represent an attempt to relate the data in a logical fashion and to show more clearly the relationship between the "acting" and "reacting" "levels" of personality.

*Step 2: Arranging the data into directly comparable form.* All data for each of the 30 children which appeared in any way relevant to personality structure, as given in the two case conferences summaries, were transferred into the form of the Preliminary Personality Framework. At this stage, the material included tended to be rather diffuse, and probably contained some material not directly relevant to the child's personality. However, it

TABLE 7  
PRELIMINARY PERSONALITY FRAMEWORK

Case, Birthdate, Social Class Status, Case Conference Dates, Physical Essentials.	
<i>Aspects of Inner Life</i>	<i>Reaction to and Expression of Inner Life</i>
(a) <i>Mental Abilities</i>	(a) <i>Mental Functioning</i>
(1) Measured ability.	(1) Areas of functioning; school achievement level and its relation to measured ability; creativity; effectiveness; other characteristics.
(2) Imagination and fantasy level.	(2) Originality, creativity; relation to reality; nature and function of fantasy life; reaction to fantasy life.
(3) Achievement drive level.	(3) Nature of drive, its goal, its effectiveness, its source.
(b) <i>Impulse Life</i>	(b) <i>Reaction to and Expression of Impulses</i>
(1) Active or passive orientation.	(1) Accepting or rejecting of impulses.
(2) Problems and conflicts (sources of anxiety-guilt).	(2) Anxiety-guilt-hostility level and characteristics.
(3) Affect needs.	(3) Reactions to and outlets for anxiety-guilt.
(4) Affect orientation: outward, inward.	(4) Impulse control system, its source, its effectiveness.
	(5) Channeling of impulses: introversive or extroversive; controlled or uncontrolled; conforming or non-conforming and to what; adaptive or non-adaptive to reality.
	(6) Expression of impulses: general characteristics; sexual adjustment; degree of maturity; activity life with self, with peers, at home, at school, etc.
(c) <i>The Self</i>	(c) <i>Social Relationships</i>
(1) Characteristics of the self.	(1) Social participation characteristics: peers, adults.
(2) Dominant motivations.	(2) Dominant adjustments.

was felt that it was wiser to include "too much" rather than "too little."

It will be remembered that the children were studied from the years 1942-46. This time-span raised the problem of establishing a time-level parallel for each child: it would be an unwise procedure to accept data for one child collected a year or two years later than those for another child. This problem was handled by the recognition that it did exist and by taking the Spring of 1946 as the deadline on the receipt and utilization of material. (The Case Conferences utilizing the Conceptual Framework began in October, 1946, and continued through the summer of 1947. This study was begun in January, 1948.)

*Step 3: Analysis of the data into personality characteristics.* The major purpose of Step 2 was to arrange the basic data in a directly comparable form so that they might be handled as meaningfully and economically as possible. The next step was to break the data in the personality frameworks down into as extensive a listing of discrete personality characteristics as the data themselves demanded.

*Step 4: Setting up the basic data sheet.* A check-list chart for "counting" purposes was set up as the basic data sheet, for every one of these characteristics for every child. This chart was organized in the manner indicated in Table A. That is, a separate "box" was provided for every trait for every child, in which could be indicated the stated presence or absence of the particular characteristic for a particular child.

TABLE A

Personality characteristic	Cases
1, 2, Etc. (Listed as in Appendix D)	T-1, T-2, T-3 T-7 (continued horizontally across for all 30, boys following girls)

*Step 5: Arriving at sex-group totals.* The data in each of the 30 preliminary personality frameworks were carefully analyzed for the stated presence of the listed characteristic. If it was mentioned, its presence for the particular child was indicated by a check-mark in the space or box provided. If the framework data did not contain a statement concerning the presence of the characteristic, the first internal reliability check was employed: the case conference summaries from which the personality framework data had been obtained were also checked for the stated presence of the trait, lest it had been overlooked in the original transposition of relevant material. If neither the personality framework data nor the case conference summaries gave stated evidence of the presence of the trait in question, it was presumed to be absent for that child and the check-list box left blank. That is, each provided space on the check-list chart represented a judgment of presence or of absence. Upon completion of this checking operation, the number of girls possessing each characteristic was totalled, as were the number of boys.

At this stage, the relevant original-instrument-data were not referred back to.

*Step 6: The preliminary chi-square analysis.* The first statistical testing of the basic data sheet was then applied. A chi-square analysis was made of the totals in order to answer the question: are there a sufficient number of sex-typical characteristics present to warrant continuing with the study?

The results of this first chi-square analysis were presented to the writer's thesis committee, and it was the consensus of the committee that these results warranted the continuance of the study, subject to an agreed-upon reliability procedure (given as Step 9).

*Step 7: Re-checking with original instrument results.* Before setting up the reliability check, the entire basic data sheet was re-checked (the second internal reliability check) in the following manner: For every trait for every child, the results of the appropriate original instrument were consulted, with this question constantly in the researcher's mind: "If I were asked to refer to or to quote the actual stated evidence for each one of those check marks, or to establish that there was no evidence where I have left the box blank, could I do so readily?" The check-back to the original instruments resulted in a sufficient number of changes in the basic data sheet to indicate that the inclusion of such a check-back to original instruments on the part of the judges in the reliability study would be necessary under certain conditions.

*Step 8: The final chi-square analysis.* The re-checked and re-totalled data-sheet was subjected to a second chi-square analysis.<sup>10</sup> It is the results of this second statistical analysis which form the basic findings of this study: 134 often-interlocking characteristics are included. Only those traits manifested by fewer than three of the 30 children have been omitted. It should be made clear that the use of the chi-square technique distinguishes which traits are manifested significantly more often by one sex-group *as compared with* the other sex-group.

This analysis revealed seven personality characteristics to be "typical" of the girls as a group as compared with the boys as a group; that is, the number of girls manifesting each of these traits is significantly greater than the number of the boys at the 5 per cent level, for a sample of this size. *Thus, for the girls of this sample:*

1. If an achievement drive is present, its chief source is the desire to conform to parental and/or general social mores. For those girls possessing a drive for achievement in the academic area, a major motivation for this

<sup>10</sup>The basic formula used was the Fisher-Yates correction for small samples,

$$\chi^2 = \frac{N_s \left[ (ad - bc) - \frac{N_s}{2} \right]^2}{A.B.C.D.}, \text{ and Finney's tables (23) which allow for this}$$

formula's tendency to over-correct.

drive is a wish to conform to parental values and demands and to the value-system of the school itself.

2. They accept their impulse-life inwardly, but do not allow it outward expression. That is, they habitually express their feelings, emotions, and desires only on the inner, covert level, but suppress the overt spontaneous expression of their impulses, particularly their aggressive and sexual feelings.

3. A source of their feelings of anxiety (see group characteristic No. 2, for a discussion of the term "anxiety" as used in this and subsequent characteristics) is their perception of the world as hostile or unfriendly and unrewarding. They have a general picture of their world, especially of social reality, as being unfriendly, even threatening, to them. It is not seen as a warm supportive place in which to be but as a cold and unsympathetic environment. This perception contributes to their inner feelings of fear and apprehension (see also 12 and 15 below).

4. They manipulate others in their social world as a reaction to their feelings of anxiety. Their feelings of affectional lack, fear of disapproval, need for admiration motivate them to manipulate others (particularly those their own age and younger) to do things that will lead to their obtaining the approval and admiration from adults and peers that they need. For example, a girl may consciously act wistful and fearful in order to be treated protectively and lovingly; another girl may make a practice of breaking up a close friend's other friendship in order to have the friend "to herself."

5. They use fantasy, fantasy-escape, daydreaming, as an outlet for their anxiety-feelings. Reading romantic "escapist" fiction and dreaming about the future when "things will be better," about having magical powers that can annihilate disliked persons, about being pretty and popular and the center of attention (the most frequent themes mentioned in the case materials), serve to release inner tensions.

6. Paralysis of action, that is, overly-rigid outer control, is a frequent reaction to their feelings of anxiety. Occasionally they become so tense and fearful lest their inner feelings of strain and tension burst through that they are rendered incapable of taking any action at all on their problems; their outer control of their emotions becomes so suppressing as to be rigid. Characteristics 4 and 6 are not mutually contradictory: both may be manifested by the same girl.

7. They find the accomplishment of set tasks satisfying. It relieves their inner tensions to start and complete simple, routine tasks such as cleaning their rooms, putting the house in order, doing their homework.



Although the null hypothesis is not usually rejected when the value of chi-square falls at the 20 per cent level of confidence, the size of the sample here involved, 30, is small enough to warrant including the characteristics which are typical of one or the other sex at this level, pending their further investigation with larger populations. The inclusion of characteristics typical at the 20 per cent level yields eight further traits typical of the girls as compared with the boys. Thus, for the girls of this sample, it is further likely that:

8. They are either unable to relate emotionally to others, particularly peers, or they avoid emotional ties with others. Although they have friendships and social relationships with others, these are not so much on the basis of whole-hearted emotional involvement, but rather on the basis of common interests and activities: they cannot bring themselves to be deeply involved emotionally with anyone (other than their parents), apparently because they feel too deprived of affection themselves to be able to give affection freely to others (see 12 and 15 below).

9. A major means of adjustment and of gaining their individual motivations is through active conformity to the middle class guide-lines of their social environment. They have found that if they do what their parents and other adults tell them to do, as well as those things within the peer group that their friends approve of—if they are "good," if they work hard at school, if they dress neatly, if they behave properly when adults are around, if they act like their friends—they not only get the approval they need, but they also are able to reduce their inner concerns and tensions and feel happier.

10. Their school achievement is up to or higher than their tested ability.

11. Emotional factors due to their drive for conformity interfere with their mental functioning. Their effort to do what is "right," what is approved by their teachers and parents and friends, restricts the creative use of their imagination and their ability to organize concepts meaningfully.

12. Feelings of anxiety derive from inwardly-felt affectional deprivation. They feel they have never had enough love and affection from their parents and these feelings of lack contribute to a continual state of inner tension of varying degrees of intensity (see also 3 above and 15 below).

13. Feelings of anxiety derive from conflict between inner and social demands. What they would like to do often conflicts with what others, particularly authoritative adults, expect them to do and insist that they do. For example, although they would like to express their aggressive impulses freely, they know adult approval will be withdrawn if they do so; the ensuing inner conflict engenders tension.

14. Feelings of discouragement and worthlessness (intrapunitive tendencies) are a reaction to their feelings of anxiety. They believe themselves to be inadequate, ineffective beings, unworthy of being loved, as a result of their feelings of affectional lack and fears of failure.

15. They feel a need for more affection than they are receiving and/or a need for more social approval.

The statistical analysis further revealed 10<sup>11</sup> personality characteristics to be typical of the boys as a group as compared with the girls as a group; that is, the number of boys manifesting each of these traits is significantly greater than the number of girls at the 5 per cent level, for a sample of this size. Thus, *for the boys of this sample*:

1. A source of guilt or of feelings of anxiety is their concern over their lack of impulse-control. They are aware that their impulsiveness is not adult-approved and they feel either guilty or anxious as a result.

2. They have sensual self-comfort outlets other than fantasy for their inner feelings of anxiety. A means of compensation or adjustment for them is the adoption of activities which afford sensual gratification, such as excessive eating, body-contact sports, certain hand-skill hobbies, swimming, excessive verbalism, raising animals.

3. They have poor relations with their teachers, a factor in their underachievement at school (see 7 and 12 below).

4. They are in an active *process* of developing a self-directive system of impulse-control; that is, they are aware that impulse-control is their own job and are working at achieving it.

5. A major motivation is the desire to know how to control their impulses.

6. Their affect-direction is inward: they are either narcissistic or preoccupied with themselves. They tend to direct their emotional energies inward in self-love or in self-preoccupation.

7. Their overt behavior is a reactive, covering-up "front" for their anxiety feelings. They adopt a "tough guy" behavior pattern as a defense measure, as a means of hiding their inner anxieties, guilt-feelings, and affectional needs.

8. If accepted by their friendship clique, they are accepted because of their tendency to spontaneous self-expression.

9. A major means of adjustment is impulse-satisfaction, conforming to outer demands only enough to be left free to do this.<sup>12</sup>

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<sup>11</sup>Later reduced to eight.

<sup>12</sup>Characteristics later found to be manifested by boys deviate from the most typical grouping.

10. They have found that friendly ties with others leave them freer for self-exploration.<sup>13</sup>

If we include those characteristics which are typical of the boys as compared with the girls at the 20 per cent level of confidence, as was done with the girls, there are 6<sup>14</sup> further traits typical of the boys as compared with the girls. Thus, for the boys of this sample, it is further likely that:

11. They are acceptant of their impulse-life, but their use of it for solving life problems is limited. That is, they are acceptant and expressive of their impulses, but they do not use them in a constructive, channelized way to work through their personal problems.

12. Their school achievement is below their tested ability.

13. They either have or are capable of having warm emotional ties with others (as contrasted with Characteristic 8 for the girls).<sup>15</sup>

14. If accepted by their friendship clique, one reason is their tendency to be warm and nurturant.

15. They tend to participate socially more with friends older or younger, than with their age-mates.

16. They tend to see the peer social area as a place where they are not accepted and do not belong.

Further discussion of the personality constellations above presented, as well as any attempt to construct from them a coherent, dynamic feminine and masculine personality structure, is temporarily delayed, pending their further analysis in the two subsequent chapters.

The presence of "group-typical" characteristics was first noted in connection with the derivation of the five "most typical" girls and the five "most typical" boys, required for the reliability study (Section IV). The original intention had been to select as "most typical" those five girls possessing the greatest number of sex-typical ("feminine" for this group of girls) characteristics, and the five boys with the highest number of sex-typical ("masculine" for this group of boys) characteristics. However, certain characteristics were manifested by a large proportion of these adolescent children as a group, irrespective of sex; it therefore did not seem valid to select any boy or girl as "most typical" who did not possess at least a majority of those characteristics which seemed to be common to this entire group of early-adolescents.

Therefore, all characteristics manifested by 20 or more of these 30 children

<sup>13</sup>Later reduced to five.

<sup>14</sup>Characteristic later found to be manifested by boys deviate from the most typical grouping.

(2/3) were designated as "group-typical." Twelve<sup>10</sup> such traits appeared as group-typical according to this standard, five of them already found to be more typical, in the statistical sense, of one sex than the other. That is, although significantly more of one sex than the other manifested these characteristics, the combined number of boys and girls who possessed them totalled over 2/3 (range: 21-26)<sup>17</sup> of this entire group of 30 adolescents.

Before listing these traits, a brief analysis of their general meaning must be made. Several of these characteristics are so universal in nature (see especially 5, 8, 10 below) as to raise such questions as: "What is unusual or out-of-the-ordinary about that?" "Don't most people show these characteristics? May as well say that two eyes are 'typical' of this group of children."

The clinical basis for these traits being pointed to as present among each of these children must again be reviewed. According to the interpretive criteria utilized by the projective-test analyst, they have been pointed to as present because their existence in the personalities of each of these children is sufficiently pronounced to be of clinical significance: (a) their degree of presence is markedly like or markedly unlike that in "healthy" personality organization and functioning, (b) their degree of presence is markedly like or markedly unlike that which is considered "usual" for a population of this particular developmental level.

Thus, for these children as a group, irrespective of sex:

1. Their school achievement is below their tested ability.<sup>18</sup>
2. Their level of anxiety and/or guilt is high or pervasive. These children, as a group, carry with them feelings of inner tension and apprehensiveness. They are afraid of doing the wrong thing, of being punished for doing "wrong," particularly through having their parent's affection withdrawn. They have a continual feeling of striving for the "unattainable" as a result. These feelings may be attached to specific life situations, such as achieving in school or getting the chores done at home, or they may be diffuse, "free-floating," pervasive in character—or both. Or, these inner tensions may be primarily guilt feelings—they feel guilty for having done something "wrong" or they have a generalized feeling of guilt: they

<sup>10</sup>Later reduced by one.

<sup>17</sup>If it were assumed that each of these group personality characteristics occurred 21 times out of 30, on the hypothesis that its probability of occurrence in the total defined population is chance (.5), then the probability of its occurrence in any 100 individuals is .95 ( $\chi^2$  value is 4.033, 1 d.f., null hypothesis rejectable at the 5 per cent level of confidence).

<sup>18</sup>Group characteristic later found to be non-typical of the larger age-social-class group (see pp. 46-47).

are convinced that they are basically "wicked" beings. Davis has described the genesis of such feelings of anxiety or of guilt and their rôle in making the middle-class-oriented child adaptive to the demands of our achievement-emphasizing, middle-class-dominated society (13).

3. Their ability to organize mentally is poor. Although the children of this group vary in their intelligence-test ratings, as a group they have low ability to organize details and unstructured situations into meaningful whole concepts—"low" or "poor" in terms of (a) what is clinically considered to be "good" organizing ability, and (b) what each child's actual potential in this area is.

4. Their imaginal creativity is routine, stereotyped, or little expressed. As a group, these children either make little use of their imaginations or they express it in terms of unoriginal, highly conforming images and ideas.

5. Emotional factors deriving from their feelings of anxiety and constriction interfere with their mental functioning. A contributory cause of their poor organizing ability and routine imagination are their feelings of inner tension, as described in (2) above.

6. Their feelings of anxiety derive from inwardly-felt affectional deprivation. As Davis has pointed out (13), the giving or withholding of affection is a device used by middle-class-oriented parents as a device to "train" their children to be "good," that is, to be obedient, to strive for those behaviors the parents place value upon. These children as a group, and the girls significantly more so than the boys, have a strong feeling of never having had enough love and appreciation, a feeling which is a primary source of their anxiety feelings. Group Characteristic 11 below is an outcome of these feelings of lack of affection.<sup>10</sup>

7. They indulge in fantasy, fantasy-escape, daydreaming, as outlets for their feelings of anxiety. Refer to Characteristic 5 for the girls for further elaboration.<sup>20</sup>

8. They try to conform to socially-expected patterns in the expression of their impulses (note distinction from 12 below).

9. They are either unable to relate emotionally to others or avoid emotional ties with others. Refer to Characteristic 8 for the girls for further elaboration.<sup>21</sup>

10. They have an immature, dependent inner life. Their inner life orientation is still that of a child emotionally and intellectually dependent upon parent-figures, who are seen as omnipotent, omniscient, the undis-

<sup>10, 20, 21</sup>Characteristics found to be more typical of the girls than the boys.

puted source of right and wrong, approval and disapproval, succorance and rejection. They have not yet set up their own standards by which to direct their behavior, that is, they are not self-directive.

11. A major life motivation is to obtain more love, affection, or admiration from others.

12. A major means of adjustment and of gaining their individual motivations is through active conformity to "middle-class guide-lines." Refer to Characteristic 9 for the girls, for further elaboration.<sup>22</sup>

Further discussion of these group characteristics is temporarily delayed, pending their further analysis in the two following sections.

The derivation of these group-typical personality characteristics raised the problem of the representativeness of these 30 children. It was recognized that the issue was one of their representativeness of the two social class groups from which they were drawn, *LM* and *UL*, rather than of the total age-group sample. It was possible to test directly the first group-typical trait listed—school achievement below tested ability—since data on school achievement and on the Revised Stanford-Binet test were available for the entire age group. However, material directly relevant to the remaining characteristics were not available for the total group, since the projective techniques had not been used with them. It was thus necessary to choose a less direct testing method: results of five psychometric test measures closely related to personality and to the original criterion of adjustment-unadjustment, and which were available for the total age group, were selected as the "testing variables": the "liked" and the "not liked" categories on the "Guess Who" sociometric peer ratings; teachers' Behavior Ratings on "emotional stability"; the total score on the California Personality Test; the Revised Stanford-Binet, Form *M*, 1946, *IQ*'s.

The relation of school achievement to tested ability was worked out as follows: All children, irrespective of social status, for whom both school standing and *IQ* for Spring, 1946, were available, were used. School grades were quantified, total marks ranked from highest to lowest, and divided into quartiles. *IQ*'s for the same children were ranked from highest to lowest and divided into quartiles. The standing of each child on both these quartile distributions were compared. Zero discrepancy indicated that a child was in the same quartile in both measures; +1 and +2 discrepancies indicated that a child was achieving above his tested ability to the extent of one or two quartiles; -1 and -2 discrepancies indicated that a child

<sup>22</sup>Characteristic found to be more typical of the girls than the boys.

was achieving below his tested ability to the extent of one or two quartiles. The discrepancy ratings for all the *UL* and *LM* children were abstracted from the total age-group discrepancy list and compared with the 30 children of this study. The results of this comparison are included in Table 8.

Both the means and the variances of the small and the large groups on each of the other five measures selected were compared. The variances were

TABLE 8  
COMPARISON OF THE STUDY SAMPLE WITH THEIR AGE AND SOCIAL CLASS GROUP ON SIX PERSONALITY-RELEVANT DISTRIBUTIONS

Distribution	Measure	Study-Sample ( <i>N</i> : 30)	Age-Social Class Group	Value of test	Significance of the Difference
"Liked" (peer choices)	Mean	4.37	( <i>N</i> : 65) 4.15	$t = .19$	Not significant. May occur between 80- 90% of the time.
	<i>SD</i> <i>SD</i> <sup>2</sup>	4.34 18.87	5.47 29.90	$F = 1.53$	Not significant.
"Not liked" (peer choices)	Mean	2.00	( <i>N</i> : 65) 1.92	$t = .13$	Not significant. May occur between 80- 90% of the time.
	<i>SD</i> <i>SD</i> <sup>2</sup>	2.55 6.53	2.95 8.72	$F = 1.34$	Not significant.
Emotional Stability (teachers' ratings)	Mean	18.97	( <i>N</i> : 68) 20.24	$t = 1.53$	Not significant. May occur between 10- 20% of the time.
	<i>SD</i> <i>SD</i> <sup>2</sup>	3.84 14.65	3.81 14.55	$F = 1.01$	Not significant.
California Person- ality Test (total score)	Mean	135.35	( <i>N</i> : 71) 139.19	$t = .79$	Not significant. May occur between 40- 50% of the time.
	<i>SD</i> <i>SD</i> <sup>2</sup>	23.25 540.56	21.65 468.72	$F = 1.15$	Not significant.
Revised Stanford- Binet Form <i>M</i> ( <i>IQ</i> 's)	Mean	114.16	( <i>N</i> : 90) 109.39	$t = 1.59$	Not significant. May occur between 10- 20% of the time.
	<i>SD</i> <i>SD</i> <sup>2</sup>	11.5 132.25	14.95 223.50	$F = 1.69$	Not significant.
Discrepancy between achievement and ability	Number showing 22 negative discrepancy		( <i>N</i> : 63) 36 (24 of the 27 boys showed negative discrepancy)		Number showing negative dis- crepancy in the large group is insufficient to establish this characteristic as typical of the large group.

compared especially as a means of discovering whether the original "two extremes" basis of selection, "adjusted" and "unadjusted," had led to greater variability on these measures than existed in the large group; a comparison of the means alone would not necessarily reveal such an effect. The  $t$ -test for testing the significance of difference in means of independent samples was used for comparing the means;<sup>23</sup> the  $F$ -test for testing the significance of a difference in the variances of two small samples was used for comparing the variances.<sup>24</sup> The results of both sets of comparisons are included in Table 8.

These results would seem to indicate that only the first of the 12 traits designated as typical of the study-sample as a total group may *not* be assumed to be typical of the larger age-social-class group. That is, school achievement below ability is not typical of the children of the Common Man level as a group, although it may be considered typical of the boys of this social level as a group.

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<sup>23</sup>The formula used was  $t = \frac{M_1 - M_2}{\sqrt{\left( \frac{N_1\sigma_1^2 + N_2\sigma_2^2}{N_1 + N_2 - 2} \right) \left( \frac{N_1 + N_2}{N_1N_2} \right)}}$ , given and interpreted in E. L. Lindquist, *A First Course in Statistics*.

<sup>24</sup>The formula used was  $F = \frac{\text{larger } \sigma^2}{\text{smaller } \sigma^2}$ , as given and interpreted in G. W. Snedecor, *Statistical Methods*.





#### IV. THE DERIVATION OF TYPICAL AND ATYPICAL GROUPINGS

A check on the reliability of the investigator's judgments was considered a necessary procedural step. It was decided that two judges, one male, one female, should rate the five "most typical" girls and the five "most typical" boys on their possession or lack of possession of the group-typical and the sex-typical traits as a check on reliability. This procedure, *Step 9*, involved four sub-steps, as follows:

1. It was necessary first to select the five "most typical" of the 15 girls and the five "most typical" of the 15 boys. This selection was done in the following manner: A "Table of Typicality" (Table 9) was set up. This involved listing the group-typical traits and the sex-typical traits significant at the 5 per cent level vertically down the right side and the children horizontally across the top. The basic data sheet was referred to for the evidence on each child: if he or she possessed the group-typical trait in question, the relevant box was checked; if not, it was left blank. If the *presence* of a sex-typical characteristic was typical for the sex of the child, the relevant box was checked with an *x*. If the *absence* of a sex-typical characteristic was typical for the sex of the child, the relevant box was checked with a —. If the presence or the absence of a sex-typical trait was atypical for the sex of the child, the relevant box was left blank. The number of check marks (*x* and —) for each of the 30 children was then totalled: *separate totals were obtained for the group-typical and the sex-typical characteristics*. The results of this operation are given in Table 10.

It was decided on an empirical basis that any girl to be selected as "most typical" must possess at least eight of the 11 group-typical characteristics and that any boy to be selected as "most typical" must possess at least seven of these characteristics. Beyond this requirement, the five girls possessing the highest total number of check-marks were selected, similarly for the boys. Where more than one were tied for fifth place, one child was selected on an essentially arbitrary basis.

The five girls selected on the basis of this procedure were: *T-7, T-12, T-33, T-78, T-84*. The five boys selected were: *T-26, T-28, T-45, T-58, T-66*. It is interesting to note the greater variability of the boys, shown in Table 10, particularly on the sex-typical characteristics.

2. Duplicate check-lists for these 10 children were set up for each of the two judges. The check-list included 39 traits: the 11 traits typical

TABLE 9  
TABLE OF TYPICALITY  
Group characteristics: Girls

Trait <sup>a</sup> (11)	T67	T75	T99	T3	T10	T56	T1	T2	T7	T12	T29	T33	T38	T78	T84
7	x	x	x	x	x	x	.	x	x	x	.	x	x	x	x
9	x	x	x	x	.	.	x	x	x	x	x	x	x	x	x
74	.	x	x	x	x	x	x	x	x	x	x	x	x	x	x
11	x	x	x	.	.	.	.	x	x	x	x	x	x	x	x
26	x	x	x	.	.	x	.	x	.	x	x	x	x	x	x
83	x	x	x	x	.	.	.	x	x	x	x	x	x	x	x
116	x	x	x	x	x	.	.	x	x	x	x	x	x	x	x
29	x	x	x	x	.	x	.	x	x	x	x	x	x	x	x
50	x	x	x	x	x	x	.	x	x	x	x	.	x	x	x
79	x	x	x	x	x	x	.	x	x	.	x	x	x	x	x
129	x	.	x	x	x	x	x	x	x	x	x	x	.	x	x
Totals	10	10	11	9	6	7	3	10	10	10	10	10	10	11	11

## Sex characteristics: Girls

Trait <sup>a</sup> (15)	T67	T75	T99	T3	T10	T56	T1	T2	T7	T12	T29	T33	T38	T78	T84
5	.	.	.	x	.	x	x	x	x	x	.	x	x	x	x
23	.	.	x	x	x	x	.	x	.	.	x	x	.	.	.
38	x	x	.	.	.	.	.	x	.	.	x	x	x	.	.
46	.	x	.	x	x	x	.	.	.	x	x	.	.	x	.
50	x	x	x	x	x	x	.	x	x	x	x	x	x	x	x
51	.	.	.	.	.	.	.	x	x	.	.	x	x	.	.
133	.	.	.	.	.	x	x	.	x	x	.	x	.	x	x
19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
48	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
49	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
56	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
70	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
100	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
124	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
130 <sup>b</sup>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
132 <sup>b</sup>	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Totals	11	12	12	14	12	14	11	12	15	15	14	15	14	14	13

<sup>a</sup>Numbers refer to characteristics listed in the totalled basic data sheet, Appendix D.

<sup>b</sup>Characteristics omitted as typical of the boys as a result of the deviance check.

of the group and 32<sup>20</sup> traits typical of one or the other sex (it will be remembered that four of the sex-typical traits are also group-typical). The judges were asked, in accordance with listed instructions, to indicate that a child manifested a particular characteristic by placing a check-mark in the appropriate box, that the child did not manifest it by leaving the relevant box blank.

<sup>20</sup>Four non-significant traits were mistakenly included.

TABLE 9 (continued)  
Group characteristics: Boys

Trait <sup>a</sup> (11)	T39	T72	T89	T92	T36	T90	T97	T105	T53	T14	T26	T28	T45	T58	T66
7	x	x	x	x	x	x	.	x	x	x	.	x	x	x	x
9	x	x	x	x	x	.	.	x	x	x	x	x	x	x	x
74	.	x	x	x	x	.	x	x	x	x	x	.	.	x	x
11	x	x	x	x	.	.	x	.	.	x	x	x	x	x	x
26	x	x	x	x	.	.	x	.	.	x	x	x	x	x	x
83	x	x	x	x	.	.	.	.	x	x	x	x	x	x	x
116	x	x	x	x	.	.	.	.	x	x	x	x	x	.	x
29	x	x	x	x	.	.	.	.	.	x	.	x	x	x	x
50	x	.	x	x	.	x	x	.	.	x	.	.	x	.	x
79	x	x	x	x	.	.	x	.	.	.	.	.	x	x	x
129	.	x	x	x	x	.	x	x	x	.	x	.	.	.	.
Totals	9	10	11	11	4	2	6	4	6	9	7	7	9	8	10

## Sex characteristics: Boys

Trait <sup>a</sup> (15)	T39	T72	T89	T92	T36	T90	T97	T105	T53	T14	T26	T28	T45	T58	T66
5	-	-	-	-	-	-	-	-	.	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	.	-	.	.	-	.	.	-	-	.	-	-	.	-	.
51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
133	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	x	.	.	x	.	.	.	.	.	x	x	x	x	x	x
36	.	.	.	x	.	x	x	.	.	.	x	x	.	.	.
48	x	.	x	.	x	x	.	x	x	x	x	.	x	x	x
49	.	.	.	.	.	.	.	.	.	.	x	x	x	.	x
56	.	.	.	.	x	x	x	x	.	.	.	x	.	.	.
70	x	x	.	x	x	x	x	x	x	.	.	.	x	x	.
100	-	-	-	.	x	x	x	.	.	.	-	x	.	.	.
124	.	.	.	x	.	x	.	.	.	.	.	x	x	.	x
130 <sup>b</sup>	.	.	.	.	x	x	x	x	.	.	.	.	.	.	.
132 <sup>b</sup>	.	.	.	.	x	x	x	x	.	.	.	.	.	.	.
Totals	8	8	5	10	13	14	11	12	8	8	11	13	11	10	10

<sup>a</sup>Numbers refer to characteristics listed in the totalled basic data sheet, Appendix D.<sup>b</sup>Characteristics omitted as typical of the boys as a result of the deviance check.

3. Two raters or judges were obtained, one male, one female. Both were familiar with the case materials. "A," the latter judge, completed the requirements for her doctorate the same quarter that she rated these children. "B," the former judge, had worked as a research assistant on the adolescent study and was a "post-prelim" student at the time of rating. "A" rated the 10 children in August of 1948 and "B" in September of 1948. Interrogation of both judges upon completion of their respective tasks re-

TABLE 10  
SUMMARY OF THE TABLE OF TYPICALITY

Sex	Case	Number of Group-Typical Characteristics (11 possible)	Number of Sex-Typical Characteristics (15 possible) <sup>a</sup>	Total number of characteristics (26 possible) <sup>a</sup>
Girls	T- 67	10	11 <sup>a</sup>	21 <sup>a</sup>
	T- 75	10	12 <sup>a</sup>	22 <sup>a</sup>
	T- 99	11	12 <sup>a</sup>	23 <sup>a</sup>
	T- 2	10	12 <sup>a</sup>	22 <sup>a</sup>
	T- 56	7	14 <sup>a</sup>	21 <sup>a</sup>
	T- 1	3	11 <sup>a</sup>	14 <sup>a</sup>
	T- 10	6	12 <sup>a</sup>	18 <sup>a</sup>
	T- 3	9	14 <sup>a</sup>	23 <sup>a</sup>
	T- 7 <sup>b</sup>	10	15 <sup>a</sup>	25 <sup>a</sup>
	T- 12 <sup>b</sup>	10	15 <sup>a</sup>	25 <sup>a</sup>
	T- 33 <sup>b</sup>	10	15 <sup>a</sup>	25 <sup>a</sup>
	T- 29 <sup>b</sup>	10	14 <sup>a</sup>	24 <sup>a</sup>
	T- 38 <sup>b</sup>	10	14 <sup>a</sup>	24 <sup>a</sup>
	T- 78 <sup>b</sup>	11	14 <sup>a</sup>	25 <sup>a</sup>
	T- 84 <sup>b</sup>	11	13 <sup>a</sup>	24 <sup>a</sup>
Boys	T- 39	9	8	17
	T- 72	10	8	18
	T- 89	11	5	16
	T- 92	11	10	21
	T- 36	4	13 <sup>a</sup>	17 <sup>a</sup>
	T- 90	2	14 <sup>a</sup>	16 <sup>a</sup>
	T- 97	6	11 <sup>a</sup>	17 <sup>a</sup>
	T-105	4	12 <sup>a</sup>	16 <sup>a</sup>
	T- 53	6	8	14
	T- 14	9	8	17
	T- 26 <sup>b</sup>	7	11	18 <sup>a</sup>
	T- 28 <sup>b</sup>	7	13	20
	T- 45 <sup>b</sup>	9	11	20
	T- 59 <sup>b</sup>	8	10	18
	T- 66 <sup>b</sup>	10	10	20

<sup>a</sup>Later findings (p. 56) reduced this number by 2.

<sup>b</sup>The 10 children selected as "most typical" for the reliability study.

<sup>c</sup>T-92 would have been a better choice than T-26. This oversight does not, however, affect the purpose of the reliability study.

vealed that neither had systematically referred to the original instruments under certain conditions, as had been requested in the Rater's Instruction Sheet.

4. The two judges' and the writer's ratings on the 10 children were organized for analysis as follows: The respective ratings of the two judges and the researcher for each of the 10 children on each of the 39 traits were placed in adjoining columns for ease of comparison. A section of the work-sheet is here shown in Table B to illustrate what is meant. The consensus on each judgment was organized into the four headings shown in

TABLE B

Case Rater	T-7			T-12			T-33			T-78			etc. etc.
	EM	A	B	EM	A	B	EM	A	B	EM	A	B	
(Trait)													
1.	x	x	x	x	x	x	x	x	x	x	.	x	
2.	x	x	x	x	x	x	x	x	.	x	x	.	
3.	x	x	x	x	x	x	x	x	.	x	x	x	
et cetera													

Table 11. Each judgment of each of the two judges was tallied in the appropriate space in the table. The total number of tallies, that is, the results of this operation, are given in Table 11.

TABLE 11  
COMPARISON OF JUDGES' AND RESEARCHER'S RATINGS IN THE RELIABILITY STUDY  
(390 Judgments)

Rater	Disagrees with EM and agrees with the other (complete disagreement)	Disagrees with EM and with the other	Agrees with EM but not with the other (partial agreement)	Agrees with EM and with the other (complete agreement)
"A"	11	57	52	270
"B"	11	52	57	270

The results of the reliability check may thus, from Table 11, be summarized on three levels: (a) The percentage of complete agreement (of the two judges with the researcher) was 270/390 or 69.2 per cent. (b) The percentage which combines complete agreement with partial agreement (of one judge with the researcher) is  $270 + \frac{52 + 57}{2} = 324$ , 324/390 or 83.1 per cent. (c) The percentage of complete disagreement (of the two judges with the researcher) is 11/390 or 2.8 per cent.

For this kind of data, and in consideration of the fact that the two judges did not analyze the case materials as thoroughly as the instruction sheet had requested, such percentages may be considered to indicate adequate reliability.

*Step 10: The four groupings for each sex.* Table 9, the "Table of Typicality," was used further. As well as showing the most typical children, that is, the most group-typical and the most sex-typical, it also revealed the children least typical of their group or sex or both. When the number of group-typical characteristics manifested by each of the children was compared with their number of sex-typical characteristics, four groupings for

each sex, eight groupings in all, appear in the following way (the totals quoted are those given in Table 10).

The possession by a girl of seven and fewer than seven group-typical characteristics was termed on an empirical basis<sup>26</sup> "low group-typical," of eight and over, "high group-typical," through reference to the totalled personality data of Table 9. Similarly, a girl who manifested 12<sup>27</sup> or fewer sex-typical characteristics was termed "low sex-typical," while one who possessed 13<sup>28</sup> and more was termed "high sex-typical." A boy who manifested six or fewer group-typical characteristics was termed "low group-typical," seven and over, "high group-typical." Boys with nine and fewer sex-typical characteristics were termed "low sex-typical," while those with 10 or more were termed "high sex-typical." When the boys and girls were grouped into these four categories and the categories compared with one another, the previously mentioned eight groupings appear, four for each sex, as shown in Table 12.

TABLE 12  
THE CHILDREN GROUPED ACCORDING TO THEIR GROUP-TYPICALITY AND SEX-TYPICALITY: "NORM" AND DEVIANCE PATTERNS

Sex	High Group-Typical, Low Sex-Typical	Low Group-Typical, High Sex-Typical	Low Group-Typical, Low Sex-Typical	High Group-Typical, High Sex-Typical
Girls	G1: T- 2, T-67 T-75, T-99	G2: T-56	G3: T- 1, T-10	G4: T- 3, T- 7 T-12, T-29 T-33, T-38 T-78, T-84
Boys	B1: T-39, T-72 T-89, T-14	B2: T-36, T- 90 T-97,* T-105	B3: T-53	B4: T-92, T-26 T-28, T-58 T-45, T-66

\*Later findings necessitated the transferral of T-97 to Group B3.

The "most typical" children comprise Groups G4 and B4, respectively; the deviates on one or both of the two variables of group-typicality and sex-typicality are in Groups G1 and B1, G2, and B2, G3 and B3, in the manner indicated. It was decided to check back to the case materials on each member of each of these eight groupings in an attempt to discover whether there was some factor or factors common to each grouping as a group.

*Step 11: The elimination of three characteristics through use of a deviance chart.* Before carrying out the common-factor check, the deviance investiga-

<sup>26</sup>The relationship of the totals for each child to the overall totals-data, as well as a comparison of the totals with one another, were both considered in making these empirical judgments (see Table 10).

<sup>27</sup>,<sup>28</sup>Later findings (p. 56) reduced these numbers by two.

tion was carried further in an attempt to discover whether there were any characteristics which had been found to be typical of a sex-group by the chi-square technique, but which might in actuality be typical only of boys or girls deviate from their sex-group. The 30 children were accordingly regrouped into the above eight groupings in a "deviance chart," reproduced as Table 13. Their "standing" on all group-typical characteristics and the relevant sex-typical characteristics are included.

Each of the deviate groupings was compared in turn with the group most typical of their own sex, that is, with G4 and B4 respectively. This operation revealed that Characteristics 81, 130, and 132, found to be typical of the boys statistically (the latter two at the 5 per cent level) are not in actuality possessed by any in Group B4, the "most typical" group. The characteristics listed as typical of the boys must therefore be modified accord-

TABLE 13  
DEVIANCE CHART  
Girls' groupings

Trait <sup>a</sup>	G1: High Group Low Sex				G2: Low Group High Sex		G3: Low Group Low Sex		G4: High Group High Sex							
	(22)	T67	T75	T99	T2	T56	T1	T10	T3	T7	T12	T29	T33	T38	T78	T84
7	x	x	x	x	x	x	.	x	x	x	x	.	x	x	x	x
9	x	x	x	x	x	.	x	.	x	x	x	x	x	x	x	x
74	.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
11	x	x	x	x	.	.	.	.	.	x	x	x	x	x	x	x
26	x	x	x	x	x	.	.	.	.	.	x	x	x	x	x	x
83	x	x	x	x	.	.	.	.	x	x	x	x	x	x	x	x
116	x	x	x	.	.	.	.	x	x	x	x	x	x	x	x	x
29 <sup>b</sup>	x	x	x	x	x	.	.	.	x	x	x	x	x	x	x	x
50 <sup>b</sup>	x	x	x	x	x	.	.	x	x	x	x	x	.	x	x	x
79 <sup>b</sup>	x	x	x	x	x	.	.	x	x	x	.	x	x	x	x	x
129 <sup>b</sup>	x	.	x	x	x	x	x	x	x	x	x	x	.	.	x	x
1	.	.	.	.	x	x	.	.	x	.	.	.	x	.	.	x
5	.	.	.	.	x	x	.	.	x	x	x	.	x	x	x	x
12	.	x	x	x	.	.	.	.	x	x	x	x	x	.	x	x
23	.	.	x	x	x	.	.	x	x	.	.	x	x	.	.	.
38	x	x	.	.	.	.	.	.	.	x	.	x	x	x	.	.
41	x	.	.	.	x	x	.	.	.	.	x	.	.	.	.	x
46	.	x	.	.	.	x	.	x	x	.	x	x	.	.	x	.
51	.	.	.	.	.	.	.	.	.	x	x	.	.	x	x	.
53	x	x	.	.	.	.	.	.	.	.	x	x	.	.	x	x
64	.	.	x	x	x	.	.	x	x	x	.	x	.	.	.	.
133	.	.	.	.	.	x	x	.	.	x	x	.	x	.	x	x

<sup>a</sup>Numbers refer to characteristics listed in the totalled basic data sheet.

<sup>b</sup>Characteristics both group-typical and typical of the girls.



TABLE 11 (continued)  
Boys' groupings

Trait <sup>a</sup> (27)	B1: High Group Low Sex				B2: Low Group High Sex				B3: Low Group Low sex			B4: High Group High Sex			
	T39	T72	T89	T14	T36	T90	T97 <sup>d</sup>	T105	T53	T92	T26	T28	T45	T58	T66
7	x	x	x	x	x	x	.	x	x	x	.	x	x	x	x
9	x	x	x	x	x	.	.	x	x	x	x	x	x	x	x
74	.	x	x	x	x	.	x	x	x	x	x	.	.	x	x
11	x	x	x	x	.	.	x	.	.	x	x	x	x	x	x
26	x	x	x	x	.	.	x	.	.	x	x	x	x	x	x
83	x	x	x	x	.	.	.	.	x	x	x	x	x	x	x
116	x	x	x	x	.	.	.	.	x	x	x	x	x	.	x
29 <sup>b</sup>	x	x	x	x	.	.	.	.	.	x	.	x	x	x	x
50 <sup>b</sup>	x	.	x	x	.	.	x	.	.	x	.	.	x	.	x
79 <sup>b</sup>	x	x	x	.	.	.	x	.	.	x	.	.	x	x	x
129 <sup>b</sup>	.	x	x	.	x	.	x	x	x	x	x	.	.	.	.
2	x	x	x	x	x	x	.	x	.	x	x	x	x	x	x
19	x	.	.	x	.	.	.	.	.	x	x	x	x	x	x
25	.	.	x	x	.	.	x	.	x	.	.	x	x	x	.
36	.	.	.	.	.	x	x	.	.	x	x	x	x	x	.
48	x	.	x	x	x	x	.	x	x	x	x	.	.	.	x
49	.	.	.	.	.	.	.	.	.	.	.	x	x	.	x
56	.	.	.	.	x	x	x	x	.	.	.	x	.	.	.
70	x	x	.	.	x	x	x	x	x	x	.	.	x	x	.
81 <sup>c</sup>	.	.	.	x	x	x	.	x	x	.	.	.	.	.	.
93	x	.	.	x	.	.	.	.	.	x	.	.	x	x	.
98	.	.	.	.	x	x	x	.	x	.	x	x	.	.	.
100	.	.	.	.	x	x	x	.	.	.	.	x	.	.	.
115	.	.	.	x	.	.	x	x	.	x	.	.	x	.	x
124	.	.	.	.	.	x	.	.	.	x	.	x	x	.	x
130 <sup>c</sup>	.	.	.	.	x	x	x	x	.	.	.	.	.	.	.
132 <sup>c</sup>	.	.	.	.	x	x	x	x	.	.	.	.	.	.	.

<sup>a</sup>Numbers refer to characteristics listed in the totalled basic data sheet.<sup>b</sup>Characteristics both group-typical and typical of the girls.<sup>c</sup>Characteristics omitted as typical of the boys as result of this deviance check.<sup>d</sup>T-97 was transferred to Group B3 as a result of the deviance check.

ingly: the traits numbered 9, 10, and 13 should be excluded from the listing.

This modification necessitates a chain of correction of certain totals, beginning with Table 9 and ending with Table 12. Since two of the above three characteristics were originally included in Table 9, the Table of Typicality, their exclusion reduces the total number of characteristics on it to 24. For each of the girls, each of the sex-typical characteristic totals is as a result reduced by two. For four boys, T-36, T-90, T-97, T-105, the number of sex-typical characteristics and the total number of characteristics are reduced by two also. This correction brings the number of sex-typical char-

acteristics manifested by *T*-97 down to nine, which places him in the low group-typical and low sex-typical category and necessitates his transferral to Group B3 in Table 12. These corrections have been indicated in footnotes wherever they have been made.

*Step 12* constituted an attempt to discover whether there were any variables which were common to each of the eight groupings given in Table 12 as groups. Before this step is discussed, however, the personality constellations "most typical" of the girls and of the boys respectively (Groups G4 and B4 above) and of the total group will, in the interests of clarity, be further described in the following section.



## V. THE FEMININE, MASCULINE, AND GROUP PERSONALITY CONSTELLATIONS OF THIS GROUP OF EARLY-ADOLESCENTS

The three sets of derived personality characteristics have heretofore been allowed to remain at a one-dimensional, static level. This chapter will attempt to answer the question: what are the respective personality structures typical of the Common Man level early-adolescent girls, early-adolescent boys, early-adolescent group—that is, so far as this group of 30 are concerned?

The following three summaries are based on the traits listed as being typical of the girls, boys, and total group, respectively. The relevant group traits are incorporated into the feminine and the masculine constellations which are here formulated, as well as presented as a separate group constellation.

*The personality of the typical girl of this group* may be described as follows: Her inner anxieties and her drive for conformity interfere with efficient mental functioning: her ability to organize mentally is poor and her imaginal creativity is routine or little-expressed. However, if she possesses a drive for achievement, which arises from her desire to conform, this drive counter-balances the emotional reduction of mental functioning to the extent that she keeps her school achievement up to or higher than her tested ability.

Her immature, dependent inner life and feelings of affectional deprivation make it difficult for her to form emotional ties with others, especially peers.

She experiences high level or pervasive anxiety which stems from her feelings of affectional deprivation, her perception of the world as being hostile or unfriendly to her, the conflict between her desire to express her inner needs and her social environment's requirement that she suppress them. Several behaviors express her reaction to her anxieties: a drive for achievement, inefficient mental functioning, daydreaming and fantasy, paralysis of action at times, feelings of discouragement and/or worthlessness.

She attempts to conform to approved social patterns in expressing her impulses in order to gain the approval she needs and wants. This attempt leads her to accept only the inner expression of her impulses: she inhibits their overt expression (a conflictful, anxiety-producing process for her, as has already been pointed out). She has also found her chief avenues of emotional adjustment in conformity to the middle-class guide lines.

Her impulse-suppression affects her inter-personal relations: she is either reluctant or unable to form close emotional ties with her peers; rather, she tends to control and manipulate them for her own ends of social conformity and approval.

*The girl's concept of herself and of her relationship to others* may be construed as follows:

I have never had enough love and affection and I want it desperately. But my world is hostile, punishing and unloving; it is not giving me the love I need. Before I can get even a little bit of approval, I must be good, I must do what my parents and teachers tell me to do. But this is very hard for me because I often don't want to do what I am told, or I want to do what I know I'll be punished for doing. Trying to resolve the contradictions between what I would like to do and what I have to do to get approval makes me anxious and unhappy—to the extent that I can't use as much of the imagination and mental ability that I possess. But when I work very hard and try very hard to do what my teachers tell me, I can keep up my grades at school.

I find some relief from my worries in daydreaming of when I'll be important and happy or of having magical power. It also relieves me to keep busy doing simple routine jobs like cleaning my room or doing the mending. Sometimes I feel so tense that I can't do anything at all; all I can do is hang onto myself so I won't fly apart. And many times I feel that I'm just no good, worthless, so what's the use of trying at all anymore?

The way I've managed to handle the contradiction between what I want to do and what I have to do is to keep what I would like to do to myself—think about it, daydream about it, maybe talk to a good friend about it—but not actually to express my feelings of aggression and anger and curiosity about boys. That would get me into trouble and keep me from getting the affection I want. So I've trained myself to control and suppress such feelings, even though it makes me feel tense and unhappy to do so.

I'm so used to suppressing my feelings that it's hard to become emotionally tied to anyone. But I stay on good terms with the other kids so I can get them to do a lot of things for me.

*The personality of the typical boy of this group* may be described as follows: His inner anxieties interfere with efficient mental functioning; his ability to organize mentally is poor and his imagination is routine or little expressed. These factors, combined with his impulsivity, make his relations with his teachers poor and lead to academic achievement below his tested ability.

His immature, dependent inner life and his tendency to narcissism limit his using his impulses in a constructive, life-problem-solving way, although he is acceptant of his emotions.

A major life motivation is to obtain the approval of others, which he attempts to do by trying to conform to approved social patterns in expressing

his impulses. He often feels guilty, however, over his lack of impulse control. He finds outlets for his tensions in sensual self-comfort outlets such as excessive eating and creative hand work. Further, much of his overt behavior is a surface "front" which he has built up in reaction to his anxieties.

In order to obtain the approval of others, he attempts to conform to social patterns in expressing his impulses, as has been noted. Hence, he wants to learn how to control his impulses and is actively in the process of developing a system of impulse control. This inner concern causes him to direct his energies inward and he is often pre-occupied.

One reason he is accepted by his friends is his warmth and nurturance towards them. Another reason he is accepted is his tendency to spontaneous self-expression, which serves to release their emotions as well. He does not consider the peer activity area as a place where he necessarily belongs and tends to participate with older or younger friends.

*The boy's concept of himself and of his relations with others may be construed as follows:*

I want to get the approval of others, particularly of my parents. I know that the way I can do this is to behave the way they want me to behave, which means controlling how I express my anger, hostility, and aggressions. But this is very hard for me to do and my lack of emotional control makes me feel guilty and unhappy. These tensions keep me from using efficiently what mental abilities I have. I'm certainly not going to let others see that I'm worried and pre-occupied about these problems of mine, so I pretend I don't care about anything. Doing things with my hands or eating a lot make me feel less tense.

I don't like my teachers and I show it. And since I don't function as well intellectually as I could anyway, these two things keep my school grades below what I should be able to make.

I still think I'm the center of the universe and that I should be given whatever I want. The things I feel inside are okay just as they are: why should I try to change myself because others want me to?

But if I don't change, my folks won't approve of me, so I guess I'd better try. I've got to learn how to control the way I express my aggressive feelings and I'm trying to work out some way I can do so whenever I want to or whenever I have to. It's a pretty tough struggle though, and it keeps me pre-occupied.

I don't like many people, but when I do like someone, I let them know I like 'em. I think my friends get a kick out of me when I sass our teacher or mimic for them the way the principal talks. But it doesn't matter much to me if kids my own age want to be friends or not: there are always older or younger kids I can pal around with.

*The personality of the typical child of this group (irrespective of sex) may be described as follows: His inner anxieties interfere with his mental functioning: his ability to organize mentally is poor and he makes little use of his imagination.*

His immature, dependent inner life makes it difficult for him to form emotional ties with his peers. He experiences high level or pervasive anxiety, which stems from his feelings of affectional deprivation. Fantasy and fantasy-escape are an outlet for these anxieties.

Since a major motivation is to obtain more love or approval, he attempts to conform to socially-approved patterns in the expression of his impulses. He finds his chief means of gaining his motivations through conforming actively to the behavioral guide-lines provided by his middle-class social environment. Such conformity is also his chief avenue of personal adjustment, of resolving his anxieties.

*The adolescent's concept of himself and of his relationship to others may be construed as follows:*

I feel I have never had enough love and approval and I desperately want to have it. Wanting it so badly is a real strain, a strain which forces me to try to get more approval the only possible way I can get it: by being good, which means doing what my parents and teachers want me to do.

Because I depend so much on other people, I haven't yet learnt to stand on my own two feet. And because I need affection so much, I'm afraid to give too much of myself to anyone.

I can forget my worries when I daydream and imagine life to be different than it is. But my worries keep me from using as much of the mental ability and imagination as I have.

## VI. RELATIONSHIP OF FIVE ENVIRONMENTAL AND BIOLOGICAL VARIABLES TO THE TYPICAL AND ATYPICAL GROUPINGS

The last procedural step, *Step 12*, was undertaken in an attempt to answer the question: can any variables be discovered which show a relationship to each of the eight typical and atypical groupings, derived and discussed in Section VII, as groups?

Comparison of these eight groupings with (a) the children's social class status (given in Table 3) (b) their IQ's (given in Table 4), (c) their sexual maturation level (given in Table 5), (d) their original selection for the character study as "adjusted," "unadjusted," or in the "middle range" (given in Table 6), reveal no consistent patterns of group relationship with any of the four variables, as shown in Table 14.

The finding that there is no apparent relationship with social-class status, that T-72 is not a lone deviate from the group, and that children originally selected as "adjusted," "unadjusted," and in the "middle range," are represented in every grouping, would seem to confirm the validity of the selection procedure for the sample, as described in Section II.

The fifth area investigated for its possible relationship to the eight groupings was that of home environment: familial value-systems or training goals, the ways in which the parents have enforced or implemented these values or goals, and the nature of the parental relationship with the child. Although a thorough analysis of these environmental factors would constitute another dissertation in itself—an investigation of social class and sex-rôle training is the partner, corroborative study to the present one—a scanning of the case materials has pointed to some consistent group patterns in this area, particularly for the girls.

It was found that the discriminating variable was not so much connected with the presence or absence of espousal of middle class values and behavior in the home; all of the homes were found to espouse such values. Rather, it was the ways in which the parents, and especially the mother, implemented or trained their children to conform to these values and behaviors. The nature of the mother-child relationship seemed to be the single most discriminating variable.

The home environments of the two "most typical" groupings (high group-typical and high sex-typical), G4 and B4, will be described first, in order to set the "norm from which deviation may be judged.



TABLE 14  
COMPARISON OF THE EIGHT GROUPINGS WITH THE FOUR VARIABLES OF SOCIAL CLASS  
STATUS, IQ, MATURATION LEVEL, CHARACTER STUDY RATING

Girls' groupings					
Grouping	Child	Social Class	IQ	Maturation Level <sup>a</sup>	Rating <sup>b</sup>
G1: high group low sex	T-2	LM	111	post	"A"
	T-67	UL	99	at	"U"
	T-75	UL	114	pre	"U"
	T-99	LM	113	post	"A"
G2: low group, high sex	T-56	LM	125	post	"A"
G3: low group, low sex	T-1	UL	126	post	"M"
	T-10	UL	107	post	"A"
G4: high group, high sex	T-3	UL	116	pre	"A"
	T-7	UL	125	post	"U"
	T-12	UL	113	post	"A"
	T-29	UL	112	at	"A"
	T-33	UL	127	pre	"A"
	T-38	UL	84	pre	"U"
	T-78	LM	116	post	"U"
	T-84	UL	114	pre	"A"
Boys' groupings					
B1: high group, low sex	T-39	UL	119	at	"U"
	T-72	UL	107	at	"A"
	T-89	UL	123	pre	"A"
	T-14	UL	107	at	"U"
B2: low group, high sex	T-36	UL	118	post	"A"
	T-90	LM	139	at	"U"
	T-105	UL	126	pre	"U"
B3: low group, low sex	T-53	UL	122	post	"A"
	T-97	UL	117	pre	"A"
B4: high group, high sex	T-92	UL	113	post	"U"
	T-26	LM	109	post	"A"
	T-28	LM	113	at	"U"
	T-15	LM	115	post	"U"
	T-58	UL	100	pre	"U"
	T-66	UL	88	post	"M"

<sup>a</sup>"At" stands for "at menarche" (menarcheal) or "at pubescence" (pubescent); "post" stands for "post-menarcheal" or "post-pubescent"; "pre" stands for "pre-menarcheal" or "pre-pubescent."

<sup>b</sup>"A" stands for "adjusted," "U" for "unadjusted," "M" for "middle range."

A. HOME ENVIRONMENT OF GROUP G4, THE HIGH GROUP-TYPICAL AND  
HIGH SEX-TYPICAL GIRLS

Child-rearing is interpreted as a moral duty by these parents: it is their duty to raise "good" (obedient) children, and to provide them with adequate physical care. For their part, the children accept that to be a good child is to do what the parents expect and to be a good child is a question of moral duty. Thus, to disobey their parents is to break a moral law.

The family is a closely-knit unit, whether or not the mother works. Most of the children's activities take place within either the immediate family circle or the extended kinship-circle. The family's community ties are usually church-centered.

The mother shows the child little warmth or affection; the father is an authoritarian figure. The mother is the active disciplinarian; the father backs up the mother in her disciplinary rôle. The training patterns emphasize the repression of impulses, especially the sexual, the importance and necessity of achievement and conformity, strictness of enforcement of early-childhood training routines. Hard work is seen as a moral duty and is interpreted within the family by the assignment of home tasks to each child. Punishment is administered in a non-hostile, almost routine manner. The approval of parents (and teachers) is the child's reward for her conformity and obedience.

The mother-child relationship typical for the G4 group may be characterized as under-loving and over-controlling.

This generalized picture holds for the home environments of T-7, T-12, T-29, T-33, T-38, T-78, T-84. Some modification is required for T-3, however. Although the family emphases are substantially the same, her mother and father are less repressive and more easy-going. Sexual matters are discussed freely. In T-3's home, it is the father who lays down the rules and the mother who enforces them. It is interesting to note, in Table 9, that T-3 is slightly less "group-typical" than the other girls in this grouping.

B. HOME ENVIRONMENT OF GROUP B4, THE HIGH GROUP-TYPICAL AND  
HIGH SEX-TYPICAL BOYS

The environmental situation does not appear to be nearly so uniform as the above for the B4 group. The homes of T-92 and T-58 conform to the generalized description above: In the case of T-28 and T-66, a particularly unsatisfactory mother relationship modifies the picture. Within the home pattern described above, both have immature, self-centered, narcissistic mothers who are far more interested in themselves than in their children,

although they provide them with all the elements of good physical care. These mothers use their children for their own ego-satisfaction: they are particularly demanding of achievement, good behavior, good appearances. Their discipline is inconsistent; their affectional expression is inconsistent and insincere. There is intense sibling rivalry and hostility on the part of both of these boys. T-26's parents are hot-tempered; strong and frequent expression of emotion is usual on the part of not only the parents but the children as well. T-66's mother also requires admiration on a sexual level, to the extent of having an erotic atmosphere for her children; T-66 is "caught" within this pattern but is beginning to rebel against it.

In the case of T-45, his mother is conscious of her early lack of maternal love for him and is in conflict over it. His father is far more authoritarian and achievement-demanding than his mother; not only does he stress middle-class values, he attempts their rigid enforcement.

T-26's father plays a similar rôle to T-45's father. However, the mother relationship is quite deviate from the others of this group: although his mother places emphasis on middle-class values and the importance of social conformity, she is not a strict disciplinarian; she can be "got around." She even tends to "baby" T-26, but he has recently begun to react against his identification with her. The mother habitually depreciates the father; there is a very poor father-T-26 relationship.

#### C. HOME ENVIRONMENT OF GROUP G1, THE HIGH GROUP-TYPICAL AND LOW SEX-TYPICAL GIRLS

The four mothers or mother-surrogates of this group emphasize middle-class values and behavior and enforce them in a particularly rigid and demanding way. All but T-99 have a most unsatisfactory mother relationship: the mother is unloving, demanding (not merely controlling), non-maternal, dissatisfied with her mother-rôle. For T-99, the home picture is very similar to that for the G4 group, but her mother is far more objective in her attitude to her child and has emphasized the importance of independence and self-reliance; the latter was true of T-2's grandmother also. (Although T-2 now lives with her mother, her early training was in the hands of her grandmother.)

#### D. HOME ENVIRONMENT OF GROUP B1, THE HIGH GROUP-TYPICAL AND LOW SEX-TYPICAL BOYS

No common pattern can be detected for these four boys except family adherence to the middle-class value-system. T-89's home picture is similar

to that described for Group G4; unlike the other boys with such mothers and fathers and home emphases, T-89 is conforming and not rebelling against it. T-72's mother is much like T-26's; his father, however, is a weak figure, and T-72 is ashamed of him. T-39 is a highly affectionally-deprived child; his mother rejects him and has given him inconsistent care and attention. His stepfather's attempts at controlling him are met with rebellion on the part of T-39. T-14's parents are much older than those of the other children—they could be his grandparents (mother 60, father 70); other than this deviation, the home atmosphere, emphases, and parental relationships are similar to that pictured for Group G4. The mother is particularly disapproving of aggressive behavior and encourages submissive reactions from T-14.

#### E. HOME ENVIRONMENT OF GROUP G2, THE LOW GROUP-TYPICAL AND HIGH SEX-TYPICAL GIRLS

Only T-56 falls into this grouping. Her home situation is similar to that for Group G4; her mother differs somewhat from this pattern, however. She is warmer and more supportive, and along with her emphasis on achievement also values and emphasizes T-56's being independent. She sets high standards of accomplishment for T-56 and pushes her *outside* the home for their attainment.

#### F. HOME ENVIRONMENT OF GROUP B2, THE LOW GROUP-TYPICAL AND HIGH SEX-TYPICAL BOYS

The parents of T-36, T-90, and T-105 all adhere to middle-class behavior-values, but are a good deal more "easy" in their enforcement of them than are the G4 parents. The mother is supportive, objective, believes in allowing her children a good deal of freedom within widely-structured limits. She is an adult person, acceptant of her wife and mother rôle; she sees and accepts her children as individuals. The father is firm but friendly in his backing up of the mother's control. It should be noted that these three boys possess, as a group, the three personality characteristics which were eliminated as not typical of the "most typical" group of boys. All three characteristics may be described as "adjustive" characteristics.

#### G. HOME ENVIRONMENT OF GROUP G3, THE LOW GROUP-TYPICAL AND LOW SEX-TYPICAL GIRLS

T-1's and T-10's mother and grandmother, respectively, are much like the B2 mothers just above, and possibly even more relaxed and permissive in

their maternal rôle. Both *T*-1 and *T*-10 seem to have been given a great deal of "psychological space" like the B2 group. *T*-1, who lives on a farm, has had a great deal of physical space and freedom of movement; her psychological space may have derived from this circumstance.

It should be made clear that these two girls are atypical of *this* sample of girls and *this* sample of adolescents. That they are also the two in their sex-group who are most acceptant of themselves as females is an interesting corollary.

#### H. HOME ENVIRONMENT OF GROUP B3, THE LOW GROUP-TYPICAL AND LOW SEX-TYPICAL BOYS

*T*-53 and *T*-97 have mothers similar to those in G3: they are easy-going, relaxed, permissive, with no strong emphasis on "obeying the rules," although the middle-class rules are there. They are almost impersonal, interested in and acceptant of their children, expressing low-level affection. They are non-repressive and relaxed about sex. *T*-53 has a close emotional tie with his father; *T*-97 has closer emotional ties with aunts and uncles than with his parents.

To recapitulate and re-integrate:

1. High group typicality among both the boys and the girls seems to be associated with a conformity and achievement emphasizing, impulse-repressing, under-loving mother (exceptions: *T*-3, *T*-26, *T*-72).

2. Low group-typicality among the girls and the boys seems to be associated with a more supportive and objective-in-attitude-to-child mother, who encourages self-reliance and plays a mature maternal rôle.

3. High sex-typicality for this group of girls seems to be associated with an impulse-repressing, over-controlling mother, who requires of her daughter obedience, conformity and accomplishment (similar to the high group-typical parental pattern above).

4. High sex-typicality for this group of boys seems to be associated with maternal approaches which seem to be at opposite poles: for Group B4, the maternal pattern is similar to that given in (3), although the father takes over the mother's demanding, repressive rôle in a few cases; while for Group B2, the parental pattern is an impulse-acceptant, psychological-space-giving one.

5. Low sex-typicality for this group of girls seems to be associated with two maternal rôles at opposite extremes: for Group G1, the mother is non-accepting of her maternal rôle, unloving, very rigid and demanding in her enforcement of "proper" behaviors; while for Group G3, the mother is

supportive, objective, and emphasizes the necessity for independence and self-reliance. Note the similarity of these two maternal patterns to those associated with *high* sex-typicality among the boys, given in (4). Also note that two of the girls in Group G1, T-99 and T-2, have been encouraged to be self-reliant.

6. Low sex-typicality for this group of boys seems to be associated with no consistent maternal or home atmosphere pattern.

Although the evidence here presented has been more suggestive than conclusive, it would appear that the only variable which seems to show any degree of commonality with the eight personality groupings *as* groups is that of parental training and relationship-with-the-child patterns, especially those with the mother, as the major interpreter of cultural values. It would seem that personality "typicality" among this group of adolescents is related to a particular home training and parental relationship pattern (as described for Group G4), personality deviance with parental emphases deviate from this dominant pattern. It would also appear from the above exploration that the training-patterns for the girls are more consistent than those for the boys.

## VII. THE INDIVIDUAL PERSONALITY AS COMPOSED OF INTERACTING CULTURAL AND INDIVIDUAL BEHAVIOR SYSTEMS

At this point, it should be made clear that no one child in the study has been described by any of the three personality constellations discussed in Section V. Each of the sex-typical and the group-typical personality structures was derived through the statistical analysis of a group of children: only those characteristics which were possessed significantly more often by one sex than the other, or possessed on a total group basis, were abstracted from each member-child's personality structure. The hypothesis of this study has assumed that it is the different sex-rôle training for each sex and the social class training of this group of adolescents which are the "factors other than chance" which are responsible for the presence of these respective constellations. These two assumptions were tested in an exploratory manner in the previous chapter.

In accordance with the definition of personality used in this study, the personality characteristics ascertained and described in this study may be termed the culturally-derived components of personality. There has been no attempt to investigate the idiosyncratic components of each of the individual personalities in this sample, beyond their use in the preliminary form of the basic data sheet (traits possessed by fewer than three of the 30 children were dropped). In order to make clear that: (a) the cultural and the individual components of personality are intertwined in the individual personality, and (b) although each child possesses certain aspects of his personality in common with others of his sex and social status, he is by no means a personality duplicate of any one or several other children, and (c) the methodological procedure adopted did serve to locate and to group together those children who had a number of personality characteristics in common, this chapter will describe the personalities of six of the children in this study group: the three "most typical" (as defined in Section IV) girls and the three "most typical" boys. The children's names used below are, of course, fictitious.

It will be recalled that each child was originally studied intensively *as an individual*; a structure allowing child-with-child comparisons was not in existence at the time the case materials were collected and interpreted for the character study. Nor were there any preconceptions as to the possible nature of such comparisons in the minds of the researchers—the original study, as has been pointed out, was done with a different research purpose

in view than that of the present investigator. It will also be recalled that the material in the preliminary personality frameworks was material transferred, with a conscious effort not to distort, from the clinical case conference summaries on each child. The parallels which become apparent as the individual personality-descriptions are presented seem all the more striking when these research circumstances are kept in mind.

*Barbara's* family is ranked *UL* in social status. In 1946, she was a small, thin, fair girl, neat in dress. She was post-menarcheal and had good motor coordination. Her Stanford-Binet *IQ* was 113. She was selected for the character study as "adjusted."

Although *Barbara* seems to be shy and withdrawn, she has a long history of neighborhood friends: they seem to respond to her overt wistfulness and appeal. Her friends are the outstanding persons in two major peer cliques. Some in these cliques resent her, perhaps because they realize that she is manipulating the social situation to her own advantage. A recent trend is towards getting out of step with the peer group: she is persisting in her "good little girl" pattern while the other girls are changing to the hoydenish adolescent pattern. Adults see *Barbara* as a very good, rather shy and wistful little girl. She plays with younger children, whom she dominates, but tends to be passive with her age-mates.

She has heavy home responsibilities: she takes care of her youngest sib and plays with her younger sister. She plays with her peers a good deal in the neighborhood setting and also participates in school activities.

*Barbara* is in the process of changing from an aggressive emotional orientation to an aggression-denying orientation. She has a high anxiety-guilt level which is pervasive and directive of her behavior. Her guilt and anxiety feelings stem from her suppressed hostility to her over-controlling mother, from sibling rivalry, from denial of her strong infantile dependency needs, from conflict between her inner and social demands. She reacts to her anxiety feelings with a strong drive to conform and with compulsive caution and attention to detail, which interferes with her mental functioning; she resists using her ability to generalize and to integrate. Her school achievement is somewhat below her ability: there is variable emotional interference with efficient mental functioning. Her general logic is mediocre, which is probably due to her tendency to avoid her emotional problems rather than to deal with them. Her imagination is dull and stereotyped, affected by her over-emphasis on the routine and on doing what everyone else does. She expresses a low degree of romantic fantasy which she does not use as escape because she is so highly influenced by the demands of reality.



A trend from accepting her impulses to their non-acceptance and repression is beginning. Barbara has high conscious outer emotional control and low but potentially higher inner control. She is introversive, but she is aware of outside pressures, and is highly adaptive and conforming to reality demands. Her mother has said of her: "She'll never make a fuss about anything or quarrel, but she gets her own way." Affectionally, her orientation is basically outward, but the trend is toward withdrawal into herself; she is incapable of giving affection. Her sexuality is still prepubescent in expression, but the heterosexual area is an open one. Her social behavior is more mature than her immature inner life.

The major characteristics and desires of Barbara's "self" are: She feels lonely, that the world is unfriendly, and would like to have a more loving and protective environment. She feels guilty because of her hostility to others, but hides it. She wants to be different than she is—to be gay, kind, happy, adventurous. She wants to have her own way, but she has learnt to get it in indirect ways. She feels that if she is good, she will get what she wants, but she will not give up her own "self" in thus being "good." Her current adjustment consists of outward conformity and caution, denial and repression of aggressive feelings, the performance of required routine tasks, persistence in working towards her goals and using disguised means to get them, projection of responsibility for her behavior onto others, particularly her mother, acceptance of love and protection from others.

Irene's family is ranked UL in social status. In 1946, she was a rather unkempt, full-busted girl with a linear body-build. She was post-menarcheal, timid in manner, and sluggish and awkward in motor coördination. Her IQ (Stanford-Binet) was 125. She was selected for the character study as "unadjusted."

Irene's social behavior may be characterized by a general withdrawal—with peers, at school, with her family. Since 1943, her status in the peer group has changed from desirable to undesirable: she is considered to be sedentary, listless, scared and unkempt by her peers and they ignore her. Her increasing lack of peer contact reflects her lack of adoption of new behaviors acceptable to the peer group: she persists in her modest, lady-like ways. She is almost invisible to adults. Her behavior at home is submissive and conforming. Her withdrawal and conformity is, however, mixed with occasional unpredictable "temper" outbursts.

She has regular home chores to perform. Most of her activities center in her home or in the immediate neighborhood, where she plays with her sibs or with neighborhood children. Her life space is limited: church and

Sunday school are important activities and she attends the movies occasionally.

Irene is passive, almost paralyzed, in her emotional orientation. She has low-level but pervasive anxiety-feelings which stem from her unsatisfied suc-corance needs, her denial of sex, her peers' rejection of her, her inability to utilize her impulse-life, her poor verbal performance in school, her feeling that the world is a hostile place, the conflict between her home demands and the peer group demands.

Irene indulges in infantile fantasies as an outlet for anxiety when under strong outside pressure. Intrapunitiveness (she feels incompetent and inferior) and passive emotional inaction are further reactions to her anxiety. Her emotional doubts and conflicts interfere with her mental functioning; her school achievement is a good deal below her ability—her educational age is 13 months retarded; her verbal functioning is poor; despite her drive to conform, she cannot make use of her ability to organize stimuli into meaningful patterns above a low-normal level of accuracy. She has very little imagination and what she has she does not use. When she uses fantasy for escape, it is child-like in quality.

She is actually unaware of her impulses and needs because of her protective defense mechanism of withdrawal. She suppresses her impulses. She has a crude inner emotional control which sometimes allows strong aggressive feelings to break through in outbursts; her high conscious outer control leads her to avoid that which she sees as bad. She is introversive, but open to external emotional stimulation. She is so highly conforming to adult requirements that she tends to be non-adaptive to reality. She does not establish emotional ties with other people, but she is reactive to affection. She has a tendency to see people as impersonal stereotypes. Although action in the heterosexual area is repressed, the area is an open one for her. Her inner life is dependent and immature.

Irene has a conformist world view, with adult authority seen as right and with virtue and passivity regarded as rewarding because they give security. She gains some satisfaction from doing the routine tasks set for her at home and at school. She is trying to be a very good little girl, which to her means trying to conform to the highly organized demands of school and home in order to gain even minimal social approval. Her passivity, withdrawal, and conformity are her major adjustments.

*Patty's* family is ranked *UL* in social status. In 1946, she was a fair, rosy-checked girl, neat in grooming and sweet in manner. She wore glasses, was in good health, and was pre-menarcheal. Her Stanford-Binet *IQ* was 127. She was selected for the character study as "adjusted."

Patty is in the process of severance from the peer group on a double basis: she is being increasingly ignored by them and at the same time she is actively withdrawing. Her earlier popularity derived from a then-approved pattern of sports, play-skills and "good, kind, sweet, little girl" behavior. Her late maturing, lack of heterosexual orientation which her mother fosters, and her own active disapproval of the hoydenish behavior of the other girls her age are all factors in this double severance process. Adults approve of her the longer they know her, particularly those whose ways of behaving she has adopted (adult asexual females). Many of her activities are solitary: home chores, movies, reading, study, sports.

Patty has an active inner, but inhibited outer, emotional orientation. She has anxiety feelings of a diffuse and unspecific nature which stem from her sex-impulse repression, her unmet infantile dependency needs, her feelings of insecurity, her feeling that the world is an unfriendly place, and from sibling rivalry.

She expresses her anxieties in her constant efforts to gain social approval, in her compulsive desire for cleanliness, in her conscientious accomplishment of set tasks at school and at home. Both her emotional immaturity and conscious striving for conformity inhibit original thinking; although capable of abstract thought, she is unsystematic to the point of confusion when required to organize relatively unstructured material. However, her strong drive for achievement and social approval enables her to keep her school achievement up to her superior capacity and she derives a great deal of satisfaction from her achievement. Her drive for conformity also interferes with her imaginal creativity and expression. In spite of strong introversive tendencies, her strong conformity need and non-acceptance of her impulses restrict her use of fantasy as escape.

Patty accepts the inner expression of her impulses, but rejects and inhibits their outer expression. She has an undifferentiated, immature system of inner control and forced conscious outer control. She derives emotional satisfaction from adherence to the general moral code to the extent of showing signs of adult morality of the "smug" variety. She is introversive to the point of self-sufficiency. Her self-sufficiency does not allow her to relate emotionally to her peers and siblings. She rejects unpleasant reality. Her affectional orientation is selectively outward—to the moral asexual women with whom she identifies. Her physical and social interests and psychological development are all immature.

Patty feels confused and hurt about the "bad" aspects of the outer world: she wishes she could be stimulated only by its "good" aspects. She enjoys

aimless, unorganized thought with no resulting action. She would like to keep herself as she is, intact. She wants to please identified-with older women by doing those things they approve—achievement, ladylike behavior, high morality, and not doing the things they disapprove of—spontaneous expression of impulses. Her major satisfactions and adjustments are her academic achievement, her reserved adult behavior, and her disapproval of childish impulsivity in her peers.

*Dave's* family is ranked *UL* in social status. In 1946, he was atypically large for his age-group, both tall and obese. He was fair, good-natured in manner, and had good motor coordination. He was post-pubescent. His *IQ* was 115. He was selected for the character study as "unadjusted."

Dave has been in constant conflict with his teachers and his peers. At earlier ages, when he expressed his resentment against his peers, they retaliated in kind. He seems recently to have withdrawn from peer participation with his age-mates and to have made friendships with older, more mature boys who have left school to work. Peer distaste for him persists, but they seem to have given up actively punishing him. Although he also resists adults, behavior usually admired by pubescent boys, his other, to them distasteful, characteristics outweigh this behavior to the extent that both peers and adults reject him. He is well aware of social structuring, heterosexual social patterns, and the accepted social mores.

Dave has recently quit school and spends all his time working with his father in his machine shop. He has excellent mechanical ability from which he gains a great deal of satisfaction.

He has an active emotional orientation. His anxiety is situational in nature: he feels guilt over his lack of impulse-control and has a tendency to self-blame. His rejection by his peers, his under-loving, over-restricting parents, his poor teacher relations, and a recurring conflict between his need for affection and his desire for independence, are all causative of his reactive anxiety and consequent conflict with others.

His outlets for his guilt feelings are an active fantasy life which is not effective as control, along with strong but unsuccessful efforts to conform. He is often restrained and confused, and sometimes rebellious. His pre-occupation with his emotional problems reduces his mental efficiency: his school achievement is well below his ability; his imagination is of good quality but it is functioning at a minimum because of his poor self-discipline, poor organization, and guilt over any spontaneity. He has not as yet come to terms with reality, which he sees as a barrier to his wishes and needs. His low academic achievement is also due to his lack of interest in the academic area and to his negative and resistive attitude to adult control.

Dave is acceptant of his impulses, but feels some guilt over his non-conforming behavior. He has a high but constrictive system of conscious outer control: it is only partially effective. He attempts some inner control, but his ego demands and concerns are so great that it is usually ineffective. He feels that it is the responsibility of his parents and other adults to control him, not his. He is introversive. His inner life is impulsive and infantile. He is both interested in and curious about heterosexual activity, but does not participate as yet. He sees people as either demanding or unloving, but shows some tendency to respond to mature women who are loving and protective.

Dave is in conflict over both wanting and not wanting to control himself and behave "as he should." He feels himself to be a person in whom no one is interested and he wants someone to be interested in him and to love him. He knows that such approval requires self-discipline on his part, but he finds such self-control too difficult. His major desire is to become a responsible, self-disciplined adult. His current adjustment is his withdrawal from the two most unsatisfactory areas of his life, school and peer group.

Chuck's family is ranked as *UL* in social status. In 1946, he was taller and heavier than others of his age group; his features were coarse but not unhandsome and he had good motor coordination. He was post-pubescent. His *IQ* was 88. He was selected for the character study as neither "adjusted" or "unadjusted" but as in the "middle range."

Chuck is an isolate in the peer group, due to a withdrawal trend which has become more marked in the last few years (since his mother stopped working). He is respected as a physically-competent figure by his peers, but there is a distinct lack of warmth in their feelings for him. Further, he actively resists any overtures they may make to him. He has a cynical "tough guy" facade, but shows a surface conformity to the standards of home and of school. He is deeply interested and willing to participate in boy-girl affairs, but so far he has not been able to bring himself to participate. He is invisible to the wider community. His "tough guy" facade is operative in his relations with adults also.

Chuck participates with peers only in games and sports. There is some family participation, but not community participation: he distrusts and resists adults as much as he does his peers.

He has an active and aggressive emotional orientation, but is self-preoccupied. He has a high level of anxiety and guilt which stems from his feelings of affectional deprivation, his strong but fearful interest in sex, his feeling that his mother is dangerous to him and that he is dangerous to himself, his feeling that there is "something wrong with me."

He reacts to his anxiety feelings with intrapunitive aggression, fantasy of a self-justifying nature, the sensual self-comfort outlet of excessive eating, feelings of personal worthlessness, an overt defensive facade of toughness, cynicism, and false superiority. His preoccupation with his emotional problems and fantasies, and his inner resistance to adult demands reduce what mental ability he has: he is not only retarded a year in school but ranks near the bottom of his class; he has no drive for academic achievement. His imagination is low-level and largely concept-dominated. He seeks active fantasy escape in his day-dreaming, reading of mystery stories and romantic fiction, identifying with imaginary heroes.

Chuck rejects his impulses, with the exception of the sexual, which he accepts inwardly. His inner emotional control is confused, his outer control constricted; he shows an overt pattern of withdrawal, as well as outward attempts at conformity. His impulse channeling is introversive and not well integrated into reality. His impulse energy is directed into sexual concerns and broodings which have a heavy guilt component and incest fantasies. His social techniques seem mature, but his inner life is strongly immature: he is childlike, negativistic, self-assertive. His affectional orientation is outward, but it is repressed and confused: he has no positive emotional ties with other people.

Chuck feels that he is "no good," a distorted being, possibly not even human. He feels his impulses are bad, that they must be kept in check and that he should be punished for having them. He sees people as "nothing," as dangerous and not worth bothering with, and will not let them touch him emotionally. He feels that girls are interesting but dangerous. He is keenly aware of his academic failure, but reacts to it with an "I'll show them I'm really better than they" attitude. He wishes he could be independent of his family, but at the same time he tries to conform to its expectations in order to gain the affection he so desperately wants.

*Fred's* family is ranked as *LM* in social status. In 1946, he was a well-built, not unattractive boy, with good grooming. He had a restless energy pattern, good motor coordination and was pubertal. His *IQ* was 113. He was selected for the character study as "unadjusted."

*Fred's* social behavior is aggressive, "tough," restless, highly competitive, negativistic. At home, he is obstinate, talks back to his parents, is on poor terms with his sister. With his peers, he shows little heterosexual interest, does a great deal of horseplay and teasing, and is unreliable: he is not steadily cooperative and does not carry through in games. Adults, particularly teachers, see him as annoying and threatening because he "stands up" to them

and to peer leaders for what he believes, and if it is profitable to him. In the peer group, he is neither a leader nor a follower, but plays an individual rôle: he is the center of one of the few male friendship cliques and is chosen for his inclination to nurture and protect more passive boys, rather than for status, accomplishment, or leadership. His age-mates also seem to get vicarious satisfaction from his impulsivity and his rebellious behavior towards adults.

Fred engages more than average in solitary activities of a mechanical and athletic nature. He loves to swap and bargain. He frequently goes out to the family's summer cottage alone. Although with the "gang" a good deal, he participates in group games and activities irregularly and unreliably. *He goes to church, the movies, the odd game, and on outings with his family.*

He has an active but immature emotional orientation. He has a high degree of anxiety and hostility which derives from his feelings of affectional deprivation, inter-parental conflict, his own lack of impulse control, and his emerging sexual interests.

He acts out his feelings of anxiety and hostility in expressions of overt aggression and hostility, expression which arouses little guilt feeling in him. *He gives up easily under stress, however.* His general anxiety, impulsive immaturity, resistance to adult authority, markedly reduce his mental potential: he is repeating the eighth grade. Intellectually, he shows a great need to organize outwardly because of his lack of inner order, but when he tries to organize things into some ordered pattern, he does it with slipshod attention to detail and poor inconsistent logic. He is hostile towards certain of his teachers. His imagination and creativity are routine to minimal and what he has is expressed in terms of his egocentricism and his anxious efforts to "cover up." Since he acts out his impulses and conflicts he fantasies very little.

Fred is actively acceptant of his impulse life (in which he is probably influenced by parental patterns of strong impulsivity). His inner control is poorly integrated, his outer control is erratic. He knows that he must learn to control himself since he cannot rely on his parents to do so, and he has sporadic guilt feelings over his lack of impulse control. His affectional orientation is outward. He likes adults with self-control and a clear-cut system of control over children. He is introversive, yet acts out his conflicts.

He feels himself to be in a state of chaos and has no clear idea of what he wants to be or to do. He wants to stabilize himself and his relationships with others, especially adults, in order to gain the inner peace and

the love he desires. His approach towards gaining these ends is direct, active, and assertive. But at the same time, he wants to express his emotions and he resists any harsh or inconsistent adult control over him; he would like to have firm but benevolent adult control as a means of helping him achieve self control and improved adult relationships. His current adjustment consists of his acting-out of his impulses, his solitary handwork activities, his acceptance of benevolent adult control, his active attempts to control his external world.

For the sake of contrast, the personalities of the "least typical" (as defined in Section VII) girl and the "least typical" boy, respectively, are here reproduced as well.

Anne's family is rated *UL* in social status. In 1946, she was a medium-sized, maturely-developed girl with high health and energy ratings and good motor coördination. She was post-menarcheal. Her *IQ* was 126. She was selected for the character study as neither "adjusted" nor "unadjusted," but as in the "middle range."

Anne has gentle, friendly personal relations with her age-mates: she is eager to please others and thinks of others first. She is chosen by her peers for her warm friendliness rather than for any status-seeking pattern or active play-participation on her part. Although she shows a strong follow-the-group tendency, she avoids the loud, "boy-crazy" girls and finds aggression and non-conformity in others distressing. She lives on a farm on the outskirts of Midwest and has an extensive free play space. She has home duties, rides her own pony a great deal, and has several pets. A neighboring childless couple play the rôle of a second set of parents to her. She does not participate extensively in peer activities, partly because of the location of her home.

Anne's anxiety feelings are low-level; they tend to be only situational in that she feels guilty after free expression of her impulses. She has no feelings of affectional deprivation and is not succorance-demanding. Her emotional orientation is active; she has high acceptance of and insight into her impulse life and uses it in an active step-by-step tackling of her problems. She has high differentiated inner control and excellent outer control. It is based on a self-directive code of behavior derived from adult models. She is introversive, highly controlled, and conforms to adult-expected patterns in a relaxed and highly-adaptive-to-reality manner. A pattern of covert rebellion against her parents' control is beginning to emerge. She has an outgoing affect: she is nurturant to others, without herself becoming emotionally involved. A pattern of shyness and hesitancy in the heterosexual area is recently changing to quiet self-confidence.



Anne's school achievement is consistently up to her superior ability, in which her drive to conform to adult-expected patterns is a contributing factor. She tends to organize and to relate intellectually with strong practicality and a clear picture of reality. She approaches problems carefully and works through them logically. Her imagination is reality bound, but is potentially more creative. Her use of fantasy is low-level, of the "reality fantasy" type: she uses it in a comforting and self-pleasing way rather than as escape from problems.

Anne has internalized the expectancy patterns of the middle class without cost to her inner life: her impulses operate freely within these control patterns. She is mature beyond her years and this maturity provides warmth to others. She would like to become a warm and loving adult, to be independent and self-sufficient, to be loyal, responsible, kind, to be surrounded by pleasing and unchallenging people and situations, to have physical comfort and pleasure, and for living to be smooth and even, without emotional involvement on her part.

Her current adjustment includes her comfortable conformity to "middle class guide-lines," pleasure in "nice things," her sense of humor and her use of reality fantasy, her interest in accomplishment, her warm, friendly personal relations, her emotional self-sufficiency.

Bob's family is ranked *UL* in social status. In 1946, he was a well-groomed, attractive boy, advanced in his physical development, in good health, energetic, with excellent gross and fine motor coordination. He was post-pubescent. His *IQ* was 122. He was selected for the character study as "adjusted."

Bob is a leader in the peer group, the integrator of their activities. He operates effectively in both peer and adult situations without much personal constraint. He is responsible in adult-controlled activities, showing no noticeable defiance or assertion. His teachers see him as a "model boy." As a leader, he is generally affable and good humored, has ideas, and does things others accept. He has the capacity to infect both peers and adults with enthusiasm. His social behavior is marked by a strong boyish activity interest, a fondness for people without any great underlying warmth of feeling, a preference for kindness and non-aggression, a narcissistic self-admiration heightened by his awareness of his popularity.

Bob shows no signs of anxiety or guilt. He thinks he is very much "okay." His problems are situational and he reacts to them situationally: some sibling hostility, an occasional low grade, lack of acceptance in some peer clique or activity. His emotional orientation is passive and submissive. He is affec-

tionally self-sufficient, with a tendency to narcissism, although he is socially perceptive and highly adaptive to reality. He is acceptant of his impulses, with the possible exception of sexuality, but restricts their outward expression. He has crude inner control but high conscious outer control. The goal of his control system is to get along well with others and to be liked, to the extent that he identifies with conventional goals to an almost excessive extent—that is, his reality integration is reduced. He shows some overt rebellion in his self-assertive independence, yet retreats rather than attacks when threatened by the outer world.

He has a strong achievement drive and his school performance is consistently superior; it is a source of satisfaction to him. His performance on both the projective and objective tests was fluctuating; he tends to show strong reactivity to external pressure. His organizational tendency is to emphasize the whole and to put details together in rather superficial fashion as a result. He has a strong practical approach and is given to direct planning and thinking rather than to flashes of intuition or imagination. Although intellectually active, his imagination is routine and his concepts average, as is his use of fantasy escape. He has a reality-bound, non-creative imagination, in which popular ideas and goals predominate.

Bob's inner life is immature and egocentric. He adheres to social codes as absolutes. He has a latent homosexual orientation, yet identifies strongly with his father; they have an extensive common-participation pattern.

Bob's dominant motivations are the seeking of self-pleasure and to achieve in order to be thought of highly by others. His current adjustments are to be active, to participate, to be with people. He retreats rather than attacks in crisis situations. He constantly relates himself to reality in a successful manner, but achieves his motivations without surrendering self-autonomy.

Comparison of Barbara with Irene and with Patty reveals a number of personality characteristics held in common by these three girls. All three show a pattern of social withdrawal; a strong drive to conform to social demands and expectations, which reduces their ability to organize mentally as well as the quality of their imagination; they have strong feelings of affectional deprivation and the related feeling that the world is unfriendly, feelings which contribute to their high level or pervasive anxiety-feelings, which in turn interfere with their efficient mental functioning and their ability to establish emotional ties with others; their inner life is immature and dependent; they do not make constructive use of their impulses; they reject the outer expression of their impulses; their adjustive outlets are the doing of routine tasks, some daydreaming, and especially being a "good"

girl—which is the means they adopt of gaining the affection they very much want.

At the same time, each of these girls manifests each of these characteristics in a manner unique to her own personality-structure. Further, each has many personality characteristics which are not shared by the others.

Similarly for the boys: comparison of Dave with Chuck and with Fred reveals several characteristics manifested by all three boys. Their school achievement is below their tested ability; their ability to organize mentally is poor; their imagination is routine or little used; they have poor relations with their teachers; their feelings of anxiety or of guilt interfere with their mental functioning; they have an immature, dependent inner life; they have inadequate, unreliable inner emotional control; their feelings of anxiety stem from a strong feeling of affectional lack; their major life motivation is to obtain more affection; they would like to be emotionally independent; they are interested but as yet non-participative in the heterosexual area; they have adopted some form of sensual gratification activity. Dave and Fred accept their impulses but do not make constructive use of them in solving their problems; they are both worried about their lack of impulse-control. Dave and Chuck have withdrawn from the peer area; they use fantasy as an anxiety outlet; they are trying to conform to social demands and this attempt, along with other problems, keeps them pre-occupied. Chuck and Fred both have a high level of anxiety or guilt and a "tough guy" covering-up behavioral facade.

As in the case of the girls, each of these boys manifests each of these characteristics in a manner unique to his own personality structure, and each has personality characteristics typical only of himself.

Anne, the "least typical" girl, differs from the other girls chiefly in her inner emotional maturity and her "internalized" impulse control. She has only situational feelings of anxiety; although emotionally self-sufficient, her ties with her peers are warm and friendly; she is conforming easily to the requirements of social reality without cost to her emotional life.

Bob, the "least typical" boy, differs from the other boys chiefly in his easy conformity to the adult world, his effective outer control of his emotions, and his emotional self-sufficiency. His anxiety-feelings are situational only.

It would seem from these comparisons that the procedural methods used in this study served to identify and to categorize accurately those children with several personality characteristics in common, as well as those children who were deviant from the others in many aspects of their personality structure.



remains the boundary-line is between "adaptive" and "non-adaptive" or neurotic anxiety. To create, by the giving or withholding of affection or approval, the anxiety which drives a child to achieve those behaviors and the social status considered desirable by his parents, seems also to create *the anxiety which leads to reduced mental functioning, daydreaming, emotional dependence, feelings of insecurity, lack of spontaneity, and difficulty in forming positive interpersonal ties.* That is, there would seem to be a cost to the individual in the social fostering of anxiety, necessary as some degree of such anxiety may be for the purpose of ensuring individual adaptiveness to the demands of a society whose socially-dominant middle class stresses the necessity of continually striving for "something better."

The analysis of the environmental factors associated with typicality and with deviance among the girls and the boys, given in Section VI, both prompts an hypothesis and yields corroborative evidence for it; that parents of the Common Man social level have a clearer and more consistent idea of the kinds of behavior it is permissible for a daughter to express than they have for a son, and that the range of behavior permitted by parents (and by society) is narrower for the girl than it is for the boys of the same social grouping. A further hypothesis (less warrantable from the evidence) is that such a narrower-in-comparison range of behaviors permissible for girls is true of all class levels in our American culture and is, in actuality, part of the overall American culture-pattern. The evidence for the first of these two hypotheses consists of: (a) the greater variability of the boys in their expression of group-typical and sex-typical traits, especially the latter; (b) the greater variability of the home-environments and maternal relationships associated with the extent of group-typicality and sex-typicality among the boys. There is, indeed, evidence in the case materials where the same father and mother are far less "strict" with a son than with a daughter; such an observation is so commonplace in our society that it has prompted the second hypothesis above.

When the typical boys and the typical girl's personalities of this group were presented earlier in this section in terms of their relative differences, a major theme for each was apparent: concern over impulse-control on the part of the boy and the drive for social conformity on the part of the girl. These two major themes suggest the hypothesis that more intensive social, particularly parental, pressure is brought to bear earlier on the girl to conform, to "be good," to suppress (aggressive) emotional expression. Conversely, the boy seems to have been allowed wider latitude in emotional expression for a longer life period—it appears that only with the coming of

The qualitative analysis of each generalized personality-constellation, the exploratory investigation of environmental factors associated with both typicality and deviance, and the comparison of the major masculine and feminine personality "themes," lead to one major modification or qualification in the propositions leading to the hypotheses, and to two partially-substantiated further hypotheses.

The number of non-typical boys (nine) and girls (seven) of this sample, together with the variability found in the home-environment patterns, point to a necessary qualification in the original assumption of a direct relationship between social-class background and personality. Although a social class in our complex American society appears to accept one dominant culture-pattern in regard to child-training objectives, it seems to allow some degree of latitude in the methods and "tone" of parental enforcement of this culture-pattern—so that relative degrees of deviation from the cultural training-methods—"norm" occur. It would seem, then, that in terms of methods of child-training (in which is included the mother-child relationship) and the resultant child-personality, there is one more dominant or widespread pattern typical of the particular social class, along with sub-patterns of varying degrees of idiosyncrasy. Group and sex typicality of personality, therefore, would appear to be associated not so much with social class *per se*, but more particularly with the extent to which the child's home emphasizes and relationship with his mother conform to the "norm" of that social grouping. Another approach to the same evidence might be one formulated in terms of the mother's personality as it affects that of her child. It may be assumed that the mother's personality is a function of her own social-class and sex-role training background. To the extent that her training conformed to the "norm" of her sex and social class group, to that extent is her personality "typical" of women of her background. The way in which the mother interprets the dominant cultural values in regard to child training (the role of the mother, the role of the child, the nature of the relationship between them) is a function of her own personality. Hence, again, a less direct, but no less real relationship between social class and personality: group and sex typicality of personality would appear to be associated with the extent to which the mother's personality conforms to the "norm," that is, the extent to which it resembles the "feminine personality" of that particular social group.

The qualitative analysis of the respective personality-structures described in Section V not only provides corroborative evidence for Davis' concept of "adaptive anxiety" among middle-class adolescents (13), but points up how

with channeling the emotional tensions arising from her anxieties and her impulse suppression into acceptable sublimations. Her drive for conformity affects her mental functioning negatively but at the same time enables her to keep up her school performance. Her inner desires often conflict with social-conformity demands, creating anxiety, which she channels into a drive for achievement, the doing of routine tasks, and daydreaming. Her anxieties interfere with her freedom to act on the outer world; she often feels discouraged and inferior.

Her suppression of her impulses carries over into the inter-personal area; she either finds it difficult to form emotional ties with others (particularly her peers) or prefers deliberately to keep herself free from emotional engagements. Her drive for social conformity and approval lead her to use others for her own purposes.

The boys and girls who were atypical of their age and sex group were found to fall into three deviate groupings for each sex, six groups in all: high group-typical and low sex-typical, low group-typical and high sex-typical, low group-typical and low sex-typical. Possible factors related to these deviate groupings were investigated. The ways in which his home trained the child to conform to middle-class-approved behavior, and the nature of the mother-child relationship, in particular, were found to be associated with both typicality and deviance, particularly for the girls. That is, typicality was found to be associated with a particular home-training and parental-relationship pattern; deviance with home patterns which deviated from this pattern.

The major feminine personality characteristics of the girls studied were compared with, respectively, those of an adult group of housewives of the same social level, those of Samoan early-adolescent girls, those of Navaho early-adolescent girls. The similarities in the feminine personality of the two different age-groups of the same class level, and the differences in feminine personality among girls of the same developmental level in three different cultures, served to highlight the rôle of social training in the genesis of personality characteristics frequently assumed to be entirely biologically-based.

#### B. HYPOTHESES IN LIGHT OF THE EVIDENCE: CONCLUSIONS

The discovery of constellations of personality characteristics typical, respectively, of the girls, the boys, and this entire group of early adolescents, substantiates the original hypotheses that such constellations would be found to exist. These results show that major sex-differences in personality have already been established by early adolescence.

# IX. SUMMARY, CONCLUSIONS, IMPLICATIONS

## A. SUMMARY

In order to test the hypothesis that a group of 30 early-adolescent boys and girls of the lower-middle and upper-lower classes manifest certain sex-typical and group-typical personalities, material on personality from intensive case-studies on each of these children was analyzed into discrete personality characteristics and the presence or absence of each such trait checked for each child. The total number of girls and of boys manifesting each characteristic was obtained and a chi-square statistical analysis applied to these totals in order to discover which characteristics were statistically more typical of the girls and which were more typical of the boys. Characteristics manifested by 2/3 or more of the total group were designated as typical of the entire group.

This procedure yielded 15 inter-related characteristics as being typical of the girls, 13 inter-related characteristics as being typical of the boys, and 11 characteristics as typical of the total group of 30.

The group-typical characteristics reveal that the typical early-adolescent of this group has a high or pervasive level of anxiety resulting from feelings of affectional lack. These anxiety-feelings have led to a reduction in mental efficiency. Daydreaming and fantasy afford an outlet for these anxieties. An immature, dependent inner life makes emotional ties with others, particularly peers, difficult. A major life motivation is to obtain more love or approval, and in order to obtain these, the middle-class behavioral guidelines, as interpreted by parents, teachers, and peers, are actively adhered to. Such conformity also provides the chief means of personal adjustment.

In terms of the ways in which he differs from the typical girl his age, the high group-typical and high sex-typical boy is most concerned over the problem of impulse-control. He has not as yet gained sufficient control over his impulses to make constructive use of them in solving life problems. His impulsiveness affects his relations with his teachers. His effort to learn how to control his impulses makes him anxious and pre-occupied. His basic acceptance of his emotions, however, allows him to relate to rejected persons on the basis of warm emotional ties and spontaneous self-expression. Conformity with the peer group is not a vital issue to him; other friends are seen as being available.

In terms of the ways in which she differs from the boys her age, the high group-typical and high sex-typical girl has already learnt to suppress overt impulse expression and is concerned with problems of social conformity and





girl of a system of conscious outer emotional control, of some adolescent withdrawal, and from her practical, matter-of-fact approach to life. She also tends to form close emotional ties with other persons, in contradistinction to both the Samoan girl and the American girl of the Common Man level.

This comparative survey of the feminine personalities typical of populations representing two age levels from the same social level in our own complex American culture, of early adolescents of a South Sea island, Samoa, and of early adolescents of an American Indian tribe, the Navaho, has been included to highlight the basic assumptions of this study: that it is social expectations as expressed in the active, many-faceted training of the child into its social sex role which is a dominant variable in the development of a personality constellation typical of each sex, and further, of a feminine and a masculine personality which is typical for each culture.

It is not here maintained that *no* inherent biologically-determined base for personality differences exists between the sexes in any culture. Rather, it is pointed out that social training is a far more dominant factor in the genesis of such differences than studies in our own culture have so far postulated.<sup>80</sup> There has been no attempt in this study to explore what the role of organic difference on the basis of sex may be as a contributing factor to psychological differences between the sexes; nor, apparently, has any study attempted to explore this point with refined physiological and psychological techniques on a cross-cultural basis.

<sup>80</sup>Helene Deutsch, *The Psychology of Women*, is an example of these studies.

of these two groups of females. The adult woman's personality appears to embody a crystallization of certain of the personality trends already apparent in the early-adolescent girl: impulse suppression is carried to the point of loss of individual spontaneity, social conformity to the point of suppression of all non-conforming impulses, fear of the consequences of doing wrong, that is, of not conforming, to the point of a generalized feeling that the world is unrewarding, vindictive, and threatening. All these "themes" are present in the adolescent girl's personality, but perhaps in not so "set" a form. Whereas, for example, the girl experiences conflict between her inner and social demands, the woman seems to have acceded to social demands at the expense of her inner demands, and a state of active conflict seems to exist in her no longer.

A further comparison of the early-adolescent girl of this study with girls from two other cultures of closely similar age level further confirms that her personality characteristics are a function of her sex-role rather than her biological role or her age level.

The Samoan girl reveals a complete lack of adolescent withdrawal, generalized anxiety, impulse suppression. There is no disturbing conflict between inner and social demands, no feeling of affectional deprivation, no drive for to-be-rewarded achievement,<sup>20</sup> no fear or hostility towards the world around her. On the contrary, she is a girl who welcomes the greater personal freedom that adolescence brings, who takes life as it comes, who expresses her impulses easily and spontaneously with no inhibiting guilt feelings, whose lack of strong emotional ties with people is due to social emphases on such behavior as a virtue rather than to any inability to express deep affectional feelings. The dominant tone of the Samoan girl's life seems to be one of relaxed good-humor, easy impulsivity, enjoyment of the pleasures of present existence.

The Navaho girl shares many of the characteristics of the Samoan girl, particularly those related to impulse expression and lack of generalized anxiety: the presence of the extended-kin family system in both the Samoan and Navaho cultures may well be the common environmental factor. However, the exigencies of daily living seem to be more demanding among the Navaho than among the Samoans, judging from the presence in the Navaho

<sup>20</sup>Margaret Mead has noted in her study that certain of the Samoan girls did tend to show these traits in limited measure; these few girls were members of the few closely-knit biological families of the Samoan villages which Dr. Mead studied; girls who participated in the loosely-knit extended-kin tribal pattern which is more typical of the Samoan culture were found by her to show none of these three characteristics.

The generalized self-concept of the early-adolescent Samoan girl may be stated as follows:

Life was never very difficult for me, but now it's even better than it used to be. All I have to do to get by is a number of household tasks which I don't find very hard; now that I'm in my teens, I can even get out of most of them by wishing them onto my little sister. If I am momentarily angry or disappointed there is always some relative nearby to whom I can go and get understanding and a jolly word.

My world is simple and orderly and accepting. It allows me to express my emotions freely. For example, I like a boy well enough to sleep with him I can do so—that is, if he likes me too. And when he no longer interests me, there are always other boys around. But I'm not very deeply attached to anyone, not even my parents; I just don't usually feel that strongly about people. All I want from life is to remain as I am now, a girl with little work and many lovers, as long as possible—and then to marry someone in my own village near my relatives and to have many children like my mother did, all in good time.

The generalized self-concept of the early-adolescent Navaho girl may be stated as follows:

I don't get particularly worried when I do something I know I'm not supposed to do. Even if my mother scolds me, I always have my favorite aunt and uncle to run to for affection—sometimes they even take my part against my parents. Perhaps that's why I don't feel hostile towards adults as a group. But I've learnt by now to control my feelings well enough so that I can do what I'm expected to do most of the time. Lately, I've been finding my own thoughts and emotions so absorbing that I sometimes withdraw into myself. This doesn't mean I'm suppressing my deeper drives; I express my emotions freely, especially the sexual. I'm well aware of what's going on around me and I'm not worried by it; I usually handle a situation on its immediate merits and then don't give it another thought. I think and live pretty much in the present—for away goals and intellectual achievement for its own sake don't have much meaning for me. I see people around me as unique individuals; I know everybody is different from everybody else and I respect people's differences. I can like whomever I wish; no one imposes any conventions or rules upon me in an attempt to influence my own choice of friends.

A comparison of the personality of the American girl of the Common Man level and that of the housewife of the same social level reveals sufficient fundamental similarities to establish that these respective personalities constellations are more directly related to sex role than to the age-level

very hard to do what my teachers tell me, I can keep up my grades at school.

I find some relief from my anxieties in daydreaming of when I'll be important and happy or of having magical power. It also relieves me to keep busy doing simple routine jobs like cleaning my room or doing the mending. Sometimes I feel so tense that I can't do anything at all; all I can do is hang on to myself so I won't fly apart. And many times I feel that I'm just no good, worthless, so what's the use of trying at all anymore?

The way I've managed to handle the contradictions between what I want to do and what I have to do is to keep what I would like to do to myself—I think about it, daydream about it, maybe talk to a good friend about it—but not actually to express my feelings of aggression and anger and curiosity about boys. That would get me into trouble and keep me from getting the affection I want. So I've trained myself to control and to suppress such feelings, even though it makes me feel tense and unhappy to do so.

I'm so used to suppressing my feelings that it's hard to become emotionally tied to anyone. But I stay on good terms with the other kids so I can get them to do a lot of things for me.

The generalized self-concept of the American Common Man level housewife may be stated as follows:

I feel I must keep on trying to win in my struggle with circumstances even though they are always so much against me that I usually feel helpless and "pushed around." My life seems to be monotonous and filled with small irritations and countless little details. I must keep my deeper emotions, especially my sexual desires, under strict control; I don't dare express them freely lest I am somehow punished for doing so. I guess I'm just a little afraid all the time—afraid I'll let myself go, afraid that if I do, something terrible will happen to me, afraid of the future, afraid of anything that's different, that I'm not used to.

I put so much effort into holding onto myself that I can't use as much of the imagination and mental ability as I possess; nor do I seem able to face up to and try to solve my emotional problems. It's my duty to conform to the expectations of the people in my world in everything I do. That means that I often have to suppress my own feelings, that I often do things I don't really want to do. But conformity is the only way I can cope with a difficult and demanding, even threatening, world, so I must suppress my own desires in order to achieve that conformity.

I'm so used to suppressing my feelings that I can't seem to let myself go even with people I like: I feel uncomfortable, somehow, with people I'm fond of. I try to act towards my husband, my sister, my husband's boss, the grocer, like one is supposed to act toward a husband, sister, husband's boss, grocer, because that's the right thing to do.

TABLE 15 (continued)

Personality area	American Adolescent Girl Common Man Level	American Housewife, Common Man Level	Samoa Adolescent Girl	Navyaho Adolescent Girl
Inter- Personal Relations	Finds it difficult to relate emotionally to peers. Manipulates them for own, anxiety-relieving purposes.	Sees other persons and relationships to them in terms of stereotypes. Inter-personal relations usually seen as troubled and strained.	Close emotional ties not usual; tendency to tone of impersonality in closest relationships. No evidence this because of any inner strains; rather the social norm.	People seen as individuals, not categorized. Respect for individual differences. Interactions between persons depend upon individual choice rather than social "rules."
Motivations and Adjustments	Need for more affection or approval; major motivation is to obtain these. Major means of gaining motivations and making emotional adjustments is through social conformity.	Feels that it is her duty to conform to the demands of the world about her and that the suppression of personal desires required to do this is necessary.	"To live as a girl with many lovers as long as possible and then to marry in one's own village near one's own relatives and to have many children" all in good time.	Not impressed with abstract goals or with intellectual achievement for its own sake.

TABLE 15  
COMPARISON OF THE "FEMININE PERSONALITY" OF TWO AGE LEVELS AND THREE CULTURES

Personality area	American Adolescent Girl Common Man Level	American Housewife, Common Man Level	Samoa Adolescent Girl	Navaho Adolescent Girl
Mental Functioning	Anxieties and drive for conformity reduce mental efficiency and imaginal creativity. But achievement drive counterbalances this reduction, in area of academic performance.	Reduced imagination and personal resources; ideas routine and concepts repetitive. Suppression of resources available for attacking emotional problems.	Is able to do all the numerous household tasks considering her responsibility by adolescence, in a relaxed, taken-for-granted way. No drive for achievement.	Practical matter-of-fact. Not impressed with abstract goals or intellectual achievement for its own sake
Impulse Expression and Control	Suppresses overt impulse expression. Conflict between inner and social demands.	Impulse suppression: fears spontaneity and impulsivity—wants to keep these under control. Resistance to mentioning sex.	Easy acceptance and expression of impulses, especially the sexual.	Conscious outer control in relation to social demands. But expresses instinctual urges freely particularly the sexual.
Anxiety Level and Sources	High or pervasive anxiety, due to feeling that world is hostile, to feelings of affectional deprivation, to conflict between inner and social demands. "Adolescent withdrawal."	Feels the environment is against her and fears that she will not succeed in her struggle with it. Lacks feeling of control over own fate. Apprehensive about the new and unknown.	No evidence of anxiety. Extended kin system provides emotional support of an impersonal type. Adolescence not a period of crisis or stress; no conflicts or remote ambitions.	Lack of guilt feelings over infractions of the rules. Affectional deprivation not a problem—extended kin to give affection. Some adolescent withdrawal.
Picture of Outer World	World seen as hostile, unfriendly, unloving.	World seen as usually unrewarding and frequently punishing for moral infractions. Viewed, further, as conventional, repetitive and filled with petty detail.	World considered non-complex, orderly, non-threatening.	Very aware of the world about her and reacts to it on a practical matter-of-fact level. No generalized hostility toward older people.

# VIII. THE FEMININE PERSONALITIES TYPICAL OF TWO AGE LEVELS AND THREE CULTURES: A COMPARATIVE SURVEY

This dissertation's hypothesis made use of the anthropological finding that different cultural sex-role training produces different sex-typical personalities. A comparison of the "feminine personality" of this group of American Common Man level early-adolescents with the "feminine personality" typical, respectively, of (a) adult housewives of the same social level (71), (b) early adolescents of a South Seas culture, Samoa (54), (c) early adolescents of an American Indian culture, the Navaho (43, pp. 174-182), may serve to confirm further the relationship between cultural training and personality.

Table 15 compares, in schematic form, the personality characteristics of each of these four "feminine personalities." The six areas of comparison: mental functioning, impulse expression and control, anxiety level and sources, picture of external world, interpersonal relations, motivations and adjustments, were derived empirically from the results of this thesis and from Warner and Henry's radio daytime serial study, since these two sources afforded the most extensive "inner life" data. The personality data from the other two cultures were transposed into this schema with conscious effort not to distort. It should be noted that projective techniques were utilized in every study here cited, with the exception of that of the Samoan girl.

It is possible to compare specific characteristics by examining Table 15. In order to compare the respective personality structures as coherent, dynamic entities, an attempt will be made to construct the generalized self-concepts of each of these four groups of females from the discrete characteristics presented in the table.

To repeat the Common Man level early-adolescent American girl's self-concept, as given above.

I have never had enough love and affection and I want it desperately. But the world is hostile, punishing and unloving; it is not giving me the love I need. Before I can get even a little bit of approval I must be good, I must do what my parents and teachers tell me to do. But this is very hard for me because I often don't want to do what I am told, or I want to do what I know I'll be punished for doing. Trying to resolve the contradictions between what I would like to do and what I have to do to get approval makes me anxious and unhappy—to the extent that I can't use as much of the imagination and mental ability as I possess. But when I work very hard and try



adolescence have the environmental pressures on his behavior increased to the extent that he feels he must develop a reliable system of impulse-control.

The apparent carryover of these two themes into other areas of expression is worthy of notice: although the boy's basic impulsivity may make him more "anti-social" and "harder to manage" at this age in the eyes of adults, this impulsivity allows him to express more readily positive emotion towards others albeit a selected few—to form emotional ties with them. The girl's emotional suppression and valuing of social conformity may make adults cordial towards her, but it also appears to make it more difficult for her to express even positive emotion towards others, or to be spontaneous in self-expression.

### C. THIS STUDY'S CONTRIBUTION TO THE LITERATURE

The results of this study have shown that major sex-differences in personality have already been established in this group of children by early adolescence. Further, the similarity of the personality typical of this group of adolescent girls with that typical of adult housewives of the same social group, as shown in Section VIII, strongly suggests that the major sex-delimited characteristics of the adult have already been established by early adolescence.

This study has added evidence on the nature of the relationship between an individual's social experience and the personality he develops: it has shown that when one person has social training experiences closely similar to those of another, they will develop similar personality characteristics.

It has further corroborated that a social class grouping may, in terms of concepts and method, be validly studied as a sub-culture within our overall American culture. It does, however, suggest that greater emphasis should be placed on the ways in which the training-agents of the sub-culture interpret its values than on the factor of social class *per se*.

It has corroborated the usefulness and validity of studying personality in terms of two interacting systems of behavior, one system culturally-derived and held in common with one's social group and/or sex group, the other system arising through individual genetic and cultural deviations; this study has identified the culturally-derived components of personality for this group of children.

The adolescent "feminine" personality constellation and the adolescent "masculine" personality constellation discovered coincides closely with the findings of other investigators of the adolescent personality (Peter Blos, Caroline Zachry, Helene Deutsch). This study has gone further than these

investigators in pointing to the rôle of cultural training in the genesis of these sex-differences. It has shown that many of those personality characteristics, generally considered in our culture to be "feminine" and "masculine" on the basis of biological difference alone, are in actuality culturally-conditioned.

In providing additional evidence for Davis' concept of "adaptive anxiety," it has also pointed up the possible danger to mental health inherent in the social fostering of even adaptive anxiety.

It has made a contribution to method in the study of particularly the covert aspects of personality of a population group, applicable on both an intra-cultural and inter-cultural basis: it has shown how personality characteristics typical of a defined population group may be discovered through application of statistical method to complex personality data—thus rendering one population amenable to accurate personality comparisons with another population group.

Although the sample is small, this study has contributed <sup>1</sup>personality data on a group of "normal," as opposed to neurotic or delinquent, early-adolescents, and in so doing has provided possibly useful normative information.

#### D. SUGGESTIONS FOR FURTHER RESEARCH

Two further studies, complementary to this one, should be undertaken to provide corroborative and more extensive evidence on the relationship between social-class and sex rôle, and personality: (a) Investigate what parents of the Common Man level consider to be appropriate behavior for girls and boys of various age levels and how they teach their children to behave in the approved manner (i.e., data on sex-rôle training). (b) Make a case study of each of the mothers or mother-surrogates of the 30 children of this study, as a means of ascertaining more exactly the nature of the relationship between their personalities and those of their children.

For comparative and corroborative purposes, a personality-study similar to the present one, as well as an investigation of sex-rôle training, should be made of children of other social-class levels, such as the lower-lower and upper-middle classes.

A follow-up investigation of the eight "typical" girls of this study should be made when they are about 30 in order to determine what kind of marital and maternal adjustment they have made.

It would be interesting to discover to what degree parents are unaware

that they actively train their sons and daughters towards different ends and in different ways.

Children of early age levels should be studied in order to discover what personality differences between the sexes first appear and the ages when such differences appear.

A number of individual counseling and therapy records might be examined to discover whether and to what extent the respective patients' early social-class and sex-rôle training have been etiological factors in their emotional difficulties.

In order to discover whether an underlying biological base exists for sex-differences in personality, it should be useful to measure energy expenditure in the two sexes in the following manner: (a) Derive a method of measuring energy expended both extratensively and intratensively. (b) Measure the energy expenditure of groups of children at various age levels from early childhood to the early 20's (and possibly even later) in order to discover whether there are significant sex differences in total energy expenditure at the various age levels; relative amounts expended extratensively and intratensively; whether, and at what ages, these relative amounts differ significantly between the sexes; whether certain definable cultural pressures are related to shifts in energy expenditure from extratensive expression to intratensive, and the reverse.

It might be interesting to explore whether social class background, not only of the parents of the individual concerned, but that of his parents' parents, bears any relationship to: (a) the "prejudiced personality" of Brunswik and Sanford (26), (b) the rate of divorce in the United States, (c) kinds of personality disturbances familiar to clinicians.<sup>31</sup>

## E. IMPLICATIONS

### 1. *Social Implications*

The presence of two dominant personality trends in the group of children studied—a need to conform (more pronounced for the girls) and high or pervasive anxiety, both of which have arisen through social-training pressures—point to a number of social implications. Their presence suggests that a large proportion of our population may be actively training its chil-

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<sup>31</sup>A recent master's thesis submitted to the Committee on Human Development by Louis Shaeffer, *The Variation of Clinically Observed Adjustment Responses With Social Class Status in a Group of United States Army Soldiers*, shows a relationship between a soldier's social class status and the nature of the "adjustment response" manifested by him.

dren to be anxious, to function inefficiently mentally, and, particularly in the case of the girls, to place high value on social conformity *per se*. This possibility raises the question: can these be considered socially-positive personality characteristics?

The data of this study further suggest that a considerable number of American girls are being "trained" to feel inferior, to find positive action difficult, to perceive their social environment as unfriendly, to manipulate others to satisfy their own needs, to have difficulty in forming close emotional ties with others. This possibility raises a further question: are these a constellation of traits which make it likely that these girls will eventually be adequate wives and mothers? A check of divorce statistics on a social-class basis may yield useful evidence on this point.

Parent education and education for parenthood are becoming widespread in our American society: the foregoing questions might well be posed to present and future parents as part of their educational experience.

Another question may be put to those in our society whose work is the therapy of the mentally ill and of individuals "with problems": to what extent may the etiology of their patients' difficulties be derived essentially from currently-approved and practiced culture-patterns? Would it be more economical of human resources, in terms of both the practitioners and the patients, to treat potential patients through social as well as individual therapy?

## 2. *Implications for Theories of Personality Development*

A number of writers in the area of personality development have maintained that the personality traits characteristic of adolescence are peculiarly a function of the onset of puberty and that once the physical changes of puberty have stabilized themselves the characteristics typical of that period pass.

Here again, the two schools of theory discussed in Section II are represented. Anna Freud, in a book published as late as 1946 (27), as a representative of the psychoanalytic or "biological" school of theory describes these characteristics as the special defense mechanisms which the ego is forced, in sheer self-preservation, to adopt at puberty in its struggle against the newly upsurging id and the again-hostile superego. If personality development is normal, these adolescent characteristics, which Miss Freud likens to the "phenomena of a peculiar disease," pass away—once the upsurge of "instinctual impulses" that puberty brings has receded (27, pp. 153-189).

Typical of the "sociological" school is Phyllis Blanchard, who ascribes the

same characteristics described by Anna Freud to the social pressures peculiar to our own culture (7): the fears and the repressions which the controlling adult world attaches to the onset of the processes leading to sexual maturity, rather than the physical processes themselves, have a strong effect on the personality of the adolescent in our particular society. The material on the Samoan girl described in Section VIII of this study is frequently cited as evidence corroborative of the sociological approach.

The question must here be raised, therefore, as to what extent the constellations described in this study are peculiar only to the early-adolescent period.

A review of the group-typical personality constellation reveals that it compares closely with the characteristics described by the above two and other writers on the adolescent personality—which speaks for the reliability of the results of this study, but may raise doubts as to what extent this constellation is typical particularly of the Common Man social level early-adolescent, as has been proposed in this study. This objection will be dealt with shortly.

A review of the sex-typical personality constellations yields quite a different answer to the question raised above. Here there is every indication that stable, determining personality *trends* have already been established: much of the adult "feminine" and "masculine" personalities of this social level can be clearly predicted from the "feminine" and "masculine" early adolescent *personality constellations*, a fact which militates against the view presented by Anna Freud in particular.

Thus, the comparison in Section VIII of the early-adolescent girl of the Common Man level with the adult housewife of the same social level has shown that while the girl is still struggling inwardly against the outer world's demands that she conform to the extent of denying her impulses, the adult woman is no longer in conflict over the issue: her habitual denial of her impulses in the interests of conformity is a "fait accompli" and no longer questioned.

Similarly in the case of the boy, although no comparable data on the adult male is available for comparative purposes: he does not yet have a reliable system of impulse control and is worried about it, a trait highly characteristic of adolescent boys but, it may reasonably be assumed, not characteristic of adult males of the same social level. The fact that the boy wants to learn to control his impulses and is actively working towards this end to the extent of self-preoccupation (three further characteristics of this group of boys) strongly predicts his acquisition of such control in the not

too distant future. Indeed, it will be recalled that four of these boys who were not in the high sex-typical, high group-typical boys' grouping, have already learned to conform to outer demands, but only enough to be left free to habitually satisfy their impulses.

That is, although trends in the boy's personality make it safe to predict that the adult male of the same social level possesses the impulse control that the adolescent boy lacks, it is also safe to predict from the same source that the nature and the basis of the adult male's system of impulse control is very different from those of the adult female of the same social level. The areas of personal spontaneity, of emotional ties with others, of the kinds of adjustive outlets adopted, of feelings toward the external world, of feelings of personal worth, are sufficiently related to impulse expression and control that differences between the adult man and woman of a similar and consistent nature to those between the adolescent girl and boy are also predictable.

The foregoing analysis can only, of course, be stated as an hypothesis, pending studies similar to the present one with adult groups of the same and different social status levels. It nevertheless seems justifiable to conclude that although the problems peculiar to the developmental level of adolescents in our American culture have an effect on the personality characteristics they manifest, the major *trends* of personality difference between the sexes at the adult level have already been clearly established by early adolescence.

To return to the objection raised earlier: to what extent is the group-typical constellation of this study primarily a function of adolescence as such, rather than of social status background, as has been proposed? It should be pointed out again that the Common Man social level comprises a sufficiently large proportion of the American population to reflect the dominant patterns of the overall culture. However, whether or not the personality constellation typical of this group of Common Man level early-adolescents differs in some ways from that of adolescents of different social levels must remain for the present a matter of theoretical orientation—until similar studies of early-adolescents of the *LL*, *UM*, and upper classes have been made. It is here hypothesized, in accordance with the theoretical orientation of this study, that definable differences in the group-typical, as well as in the sex-typical constellations will be found to exist among adolescents of the various social status levels, as a result of such comparative studies.

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## SOCIAL PERCEPTIONS AND ATTITUDES OF CHILDREN\*

*Bureau for Intercultural Education, New York City*

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## I. INTRODUCTION

The child entering school already has a long past of social learning. He brings with him perceptions of the self and differentiations of his social environment. Both may be unstable and, in some respects, indefinite; nevertheless, to many parts of self and environment there may be affixed strong affects.

The social learning in these early years has taken place mainly within the family and play groups of children. Through these agents the child becomes aware of and reacts to social forces which constitute culture; through them content, structuring, and attitudes concerning his social-psychological environment are conveyed to him; and cultural standards and mores begin to have consequences for his personality and behavior.

In this process of socialization, one of the important components of the culture which the child takes over, and one of the important determinants of his needs and his social and self perceptions is the factor of social groups in society (3, 9, 11). Even while the child's experience is within the bounds of his family, values of class and group enter into his world as they are part of the family life and customs, and as they affect the goals and anxieties of his parents. As the child's experience extends to neighborhood and school, there is greater opportunity for cultural values with respect to groups to affect his outlook on life.

When the child arrives at school, he is not just "Bill," the individual personality. His concept of himself and his place among his peers and teachers are influenced by a great many variables such as his family's socio-economic status, his father's occupation, the street on which he lives, the language of his parents, his national background, his race and religion. In many ways and in repeated situations, differences among people, such as these, which are group-derived differences, are reinforced. "Bill" knows that how his family lives is different from the families down the street; and that his parents want to move because there are too many colored or foreign or Catholics in the neighborhood. He learns that his family goes to one place of religious worship, his playmate's to another, a second playmate's to none at all. His mother's advice and admonitions help him to sense the meaning of group differences; one day as he is playing on the corner lot, his mother calls him in and warns him never again to play with those children with some group designation because they are "bad," "tough," "dirty" and so on. His response is uncertain when some boys call his brother a derogatory group name, but he quickly senses all the anger, fear, or shame of it from the way his brother reacts to the situation.

Not all children participate in the same culture patterns or are exposed to the same sanctions and taboos; but even in a rare, "isolated" environment a child cannot become socialized without becoming aware of group differentiations which exist beyond his own "isolated" group.

This research is concerned with the child's differentiation of his social environment in terms of racial and religious groups, his attitudes toward these groups, and the development of group membership aspects in his concept of himself.

Despite observations and research data to the contrary (1, 2, 7, 8), it has been assumed (5) that the development of values attached to race and religion and the awareness of social group conflicts do not occur until some vaguely designated time in "late" childhood.

For the study of social perceptions and social attitudes in their early stages of development, this investigation is concerned with "early" rather than "late" childhood, the child's first years in school (kindergarten, first and second grades). The social groups studied are Negro and white, and Catholic, Protestant, and Jewish.

The basic theories which have contributed to the formulation of this research are: (a) theories of learning of social attitudes, particularly the development of attitudes and prejudices relating to social groups, and (b) theories of the development of the self concept, those perceptions of self concerned with group membership.

In the process of socialization (4, 12) the child is confronted with culture's many ready-made social habits and social valuations. These patterns are experienced variously by the child, depending upon the constellation of forces to which he is exposed and upon his needs and personality. In the host of new situations which confront him, the child is likely to accept uncritically the attitudes and modes of behavior which the culture (or adult) supplies.

Since differentiations and valuations of social groups are a part of this learning, just as other aspects of the culture are accepted uncritically, it is to be expected that the child's perceptions and attitudes about groups conform to cultural patterns which convey group chauvinisms, harmonies, prejudices, and hostilities. Thus conformity to environmental standards and expectations rather than individual securities or insecurities would appear to be the root of the child's earliest content and valences for social groups. Conformity to culture which may be seen as an "induced" need may, in the course of time, change in character in the direction of "own" needs (9). That is, the individual not only follows the dictates of his environment



concerning attitudes toward Negroes, Catholics, etc., but he comes to "accept" these attitudes as his own, he uses them conveniently, and, perhaps, finds them an accepted source of security or outlet for aggression (6, p. 21).

Structuring of the child's social environment does not proceed independently of the development of his self concept. With increased differentiation of the self, group membership factors become increasingly important. *Belonging or not belonging* to certain groups is crucial in the child's feelings of security or insecurity (9). When group-belonging is experienced as a barrier, as a source of punishment or ridicule, there is a tendency for the individual to develop negative valences for his group, and to develop both negative and positive valences for the groups imposing the discrimination. Such dominant groups are the source of frustration and, at the same time, they possess coveted and inaccessible advantages. This theory of "self-hate" has been discussed most extensively by Lewin (10). In the same way, when group belonging is experienced as an advantage, positive valences develop toward that group and, by comparison, negative valences may develop toward other groups.

For both minority and other children group membership may be the source of values and goals, of exaggerated chauvinism, of deep satisfactions and securities. Whatever their form or origins, the group membership aspects of the self concept are related (in our present culture) to the child's basic need for acceptance of himself by others.

The specific hypotheses which grow out of the preceding theories and which are the primary concern of this research are presented below:

*A. Cultural content and attitudes with respect to racial and religious groups are learned early in childhood, in the process of differentiating the social environment.*

1. The learning reflects the particular context (sub-cultures) in which the child lives.

2. The child accepts adults' attitudes toward groups. These attitudes are learned through direct teaching and "unconscious" teaching of the adults.

3. The extent of learning about groups and the degree of crystallization of attitudes increase with the age of the child.

4. When allowed to discuss the topic, the child shows considerable interest in and concern for cultural differences. Combined with this interest is an awareness of the "verboten" nature of the topic.

*B. Group membership is one aspect of the self concept of children.*

1. It is related to the child's basic need for acceptance.

2. Negative self-feelings and personal conflicts concerning group belonging arise frequently in the minority child.

3. The rôle of group membership in the concept of self varies with the rôle of each group in society, which may be to increase or decrease its importance for the individual.



## II. SAMPLE

Data were obtained on 250 children, five to eight years of age, in kindergarten, first, and second grades. The children were from six public schools in one school district of Philadelphia in which various religious, ethnic, and racial groups are represented. The selection of the schools was made by school administrators.<sup>a</sup>

The children were chosen by taking every third name from the class lists of kindergarten, first, and second grades. In several of the schools, one or another of these grades was not available. The only exception to this procedure of selection was the elimination of children with pronounced speech defects or with prolonged absence from school due to illness.

The following racial and religious groups are represented in the sample:

TABLE 1  
RACIAL AND RELIGIOUS GROUPINGS OF SAMPLE  
(Number of children)

	School 1	School 2	School 3	School 4	School 5	School 6	Total
Negro children							
Protestant	51	0	6	9	0	29	95
White children							
Jewish	0	0	10	2	23	0	35
Catholic	0	20	0	16	22	0	58
Protestant	0	25	5	22	5	4	61
Unspecified	0	0	0	1	0	0	1
Total	51	45	21	50	50	33	250

There are 155 white children, 35 of whom are Jewish, 58 Catholic, and 61 Protestant, and one whose religion could not be determined; and 95 Negro children, all of whom are Protestant (Table 1).

The 250 families represented in the study are mainly of the lower-middle income levels, though some of them are in the low income groups. The father's occupation in 49 per cent of the cases falls into the two categories of skilled trades and factory work. The next most numerous are workers in the service trades (cab drivers, truckers, milk men) (16 per cent), and in civil service (policemen, post office clerks) (8 per cent). Owners of small businesses and office and sales workers account for 6 per cent and 4 per cent of the group, respectively. Only 2 per cent of the families are in the professional group. Five per cent of the fathers are unemployed (see Table 2).

<sup>a</sup>This research is part of the larger study in the Philadelphia public schools referred to in the statement on the title page. A district superintendent and school principals selected the schools.

TABLE 2  
OCCUPATIONS OF FATHERS OF CHILDREN IN SAMPLE  
(Percentage of children)

	School 1 (N=51)	School 2 (N=45)	School 3 (N=21)	School 4 (N=50)	School 5 (N=50)	School 6 (N=33)	Total (N=250)
Professional	2	2	19	0	2	0	2
Small Business	0	2	24	+	12	0	6
Office & Sales	0	2	5	+	14	0	4
Civil Service (such as policemen, postmen)	8	9	19	8	8	3	8
Skilled Trades	23	38	14	44	38	31	33
U. S. Military Service	0	0	0	4	0	0	1
Service Trades	25	16	0	8	14	24	16
Factory	20	18	5	28	2	21	16
Unemployed	8	4	0	0	0	18	5
No information or can't classify	14	9	14	0	10	3	4

Investigation of family conditions revealed 14 homes broken by divorce or death of one of the parents. Both mother and father were employed in 42 families, while in five the mother alone was employed.

The religious, racial, and ethnic distribution and socio-economic factors differ from one school to another. Since each school area is unique in these respects and since these variables have been considered in the analysis of the data (see Section VIII), each school area is described below.

School 1 is a large, modern school which is staffed by a Negro principal and Negro teachers (with the exception of one white teacher) and is attended exclusively by Negro children. It is located near a highly industrialized section of the city. The area was once an exclusive residential district, but has become a poor area in which there is a large proportion of substandard housing. The population of the district is predominantly Negro. The children of the few white families living in the neighborhood attend schools outside the school boundaries. The only break in the pattern of "all Negro neighborhood" is along the central commercial street, which is lined with small shops operated by non-Negro owners, many of whom are Jewish. All the children in our sample from this school are Protestant. The parents of the children from this school are engaged in service trades, some in skilled trades or factory work. The number of unemployed is high as compared to the other schools participating in the study.

School 2 is an old school located in a neighborhood of two- and three-story brick, attached row houses, and large houses converted to small apartments. The population is predominantly Anglo-white Protestant. There are some Polish and Irish Catholics, and a few Jewish families. Strong feelings on the part of the dominant white Protestant group against outsiders and the tendency for children to take to the trade of their parents and to remain in the neighborhood tighten the dividing line between those who "belong" and those who do not. The main industry consists of knitting mills, manned by weavers whose forebears in the British Isles, four or five generations back, were also weavers. No Negro families live within the school area but some live on the border of the community. Feelings of hostility are high. For instance: a Negro family moved into an old converted store. A police guard was placed on 24-hour duty. So much pressure was brought to bear on the family that they soon moved out.

School 3 is located in an industrial area. It was, until about 1940, a training school for teachers, and as such has retained some of its prestige. Children of all grades are admitted from a waiting list. The nearby residential district consists mostly of rooming houses. Only about one-tenth of the school population comes from the immediate neighborhood; these children are mostly Negro and white children from low-income families. The other children who come from outside the school boundaries, many of them travelling a distance of several miles to school, come primarily from families of professional workers, owners of small businesses, and civil service workers.

School 4 is located in a thickly populated area of small factories, stores, and houses. Originally, the population was of German American and Pennsylvania Dutch extraction. Later, Irish, Italian, Polish and other nationality groups settled in this area, with the result of hostile feelings between the old and new groups. At present, the school population represents at least 26 nationality groups. Negroes constitute 10 per cent of the population in this area. The majority of the families are Catholic and Protestant, in about equal proportions; there are a few Jewish families. Most of the fathers are skilled workers or factory workers.

School 5 is located in an old section of the city. The homes are two-story, brick, attached row houses; some of them have small lawns. The general atmosphere is that of a residential area. The extreme southern section of the district is used as a city dump and is a slum area. The Negro population is only about 2 per cent of the school population. The Italian-American group contributes a little more than one-third the school popula-

tion. The Jewish group represents about 40 per cent of the school population. Although most of the fathers are skilled workers, this school differs from the other schools in the greater number of fathers who are in office or sales work or owners of small businesses.

School 6 was built in 1897. Like the population of the area, the school population shows great fluctuation. (In an average enrollment of 649 for the year 1946-47, there were 585 withdrawals and admissions, representing a turnover of 90 per cent for the year.) Although once a fashionable residential district, the area has become run-down. The residents are predominantly low income Negro families. The school population is 94 per cent Negro. Of the white children, some are Catholic, a few Jewish, the others Protestant. The teaching staff is made up of nine white teachers and 11 Negro teachers. Fathers of children in this school are engaged in service trades, factory work, or skilled trades. Six of the families were numbered among the unemployed.

### III. PROCEDURE

#### A. THE PICTURES

The children's reactions toward racial and religious groups were obtained through the use of a series of pictures (Social Episodes Test) and a standard set of interview questions accompanying each picture. Attitudes and concepts concerning Negro and white, and Protestant, Catholic, and Jewish groups<sup>4</sup> were studied.

A projective technique was suited to the purposes of the research from several points of view. Though the factual content of the child's awareness of groups is perhaps accessible through direct questioning, the attitudinal and emotional content is not. A projective technique encourages the expression of needs, fears, and conflicts, and permits the projection of hostile ideas which the child might feel guilty to admit as his own. A projective technique avoids, to some extent, the social taboo against explicitly probing the area of racial and religious attitudes in young children.

Pictures were chosen as the field for projection because of the ease with which they could be structured to introduce variations in group symbols and group content, and because of the ready interest of young children in pictures.

The pictures used (Figure 1) were black and white sketches of groups of children in school, on the playground, and on the street. In some cases, race or religion was suggested by the picture itself, by skin color differences, or religious symbols. In all cases, group identifications were made by the tester in the course of the questioning.

The social episodes in the pictures were of four kinds:

(a). A play scene in which several children are playing, and one child in the foreground is watching them. The grouping is such that the watching child may be interpreted either as part of the play group, or as isolated from it. This is called the Barrier Picture because of the possibility of interpretation in terms of exclusion. It appears in two forms: in one case, the child in the foreground is Negro (Race Barrier Picture) and in the other case he is white (Religious Barrier Picture). In both cases, the main group of children playing is white.

(b). A play scene in which all the children are playing together. Because of the permissiveness of this situation, it is called the Non-Barrier Picture. It appears in two forms, parallel to the Barrier Picture; in the

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<sup>4</sup>The term "group" in this paper is used to refer to racial or religious units. It is convenient as an abbreviation for the enumeration of specific racial or religious distinctions as Negro, white, Catholic, Protestant or Jewish.



FIGURE 1  
BARRIER PICTURE (RACE BARRIER)

Race Non-Barrier Picture, one of the children is Negro while the others are white, and in the Religious Non-Barrier Picture, all the children are white.

(c). A street scene showing two boys leaving a house of worship and another group of boys close by. The Synagogue Picture shows two boys standing on the steps of a synagogue (which has a Hebrew inscription over the doorway) and four boys standing on a corner across the street. The Church Picture shows two boys coming from a church (identified by a spire and cross) and four boys walking up the street toward them. These pictures are not so strictly parallel as the Barrier Pictures, but the presence in each case of a religious symbol makes them easy to interpret in terms of religious group interaction. They are referred to as the Religious Symbol Pictures.

(d). Schoolroom scenes, in one case showing two children coming late, and in the other showing several empty desks as indications that children are absent. The first of these pictures is called the Mass Picture, because





FIGURE 1  
BARRIER PICTURE (RACE BARRIER, REVERSED)

it is explained that the two children who are late are Catholic and are coming late because of having attended Mass before school. The second picture is called the Jewish Holiday Picture, since it is explained that the children who are absent are Jewish and are staying away in order to celebrate Jewish holidays. These two pictures are of essentially parallel construction and are called the Cultural Observance Pictures.

The following considerations determined the final form of the pictures: (a) that each picture involve the interactions of children of two racial or of two religious groups, (b) that the situations have some similarity to the experiences of most children (playing, going to school, to church, or to synagogue), (c) that the situations depict likely circumstances in which race and religion enter into the experience of the young child, (d) that the situations be sufficiently ambiguous to allow for several possible interpretations of the interaction among the children, (e) that the situations bring in a



FIGURE 1  
NON-BARRIER PICTURE (RELIGIOUS)

minimum of immediate adult influence, and (f) that parallel social situations be given for different groups to allow comparative analysis.

The questions accompanying the pictures follow the same general pattern for each picture: In every case, before group factors are verbally introduced by the tester, the child's interpretations of the picture content are obtained. After the tester identifies the groups, there is a similar but more probing exploration of the child's interpretation. The pre-identification questions for the Barrier Pictures are: "Tell me about this picture," or "What is happening in the picture," "Tell me about this little boy" (in foreground). "Why isn't he playing?" In the Religious Symbol Pictures, the initial "Tell me about the picture" is followed by "What are these boys going to do?" On the Non-Barrier and Cultural Observance Pictures only the first question precedes identification of the group.

Introduction of the group factor by the tester on the Barrier and Non-



FIGURE 1  
BARRIER PICTURE (RELIGIOUS BARRIER)

Barrier Pictures consists in pointing out that one of the children (on the Barrier pictures, the child in the foreground) is Negro, or Catholic, or Protestant, or Jewish. On the Religious Symbol Pictures, identification involves both the house of worship and the two children who are leaving it. Thus, on the Synagogue Picture: "This is a synagogue, where Jewish people go to pray. These are two Jewish boys. They are just coming from Hebrew School." The Church picture has two forms; when the church is described as Catholic, it is explained that the two boys coming down the street are Catholic and that they have just come from church; when the church is Protestant, the boys are identified as Protestant and are said to be coming from Sunday School. The manner in which group is introduced on the Cultural Observance Pictures has already been described above.

After group identification of the children in the picture has been established, the questions which were asked before identification are repeated,



FIGURE 1  
NON-BARRIER PICTURE (RACE)

with the addition of a series of questions concerned specifically with the meaning and values attached to group labels ("What is Catholic?—Protestant?" etc. "Is this little boy glad he is ————? Would he sometimes like to be ————?")

### B. ADMINISTRATION OF THE TEST

The picture test was administered in two interview sessions, separated by an interval of about a month. Each session lasted between 30 and 40 minutes. The test was given to each child individually in a room alone with the tester, who was familiar to the child only as an adult who had visited the classroom and played with the children. The child was told that he would have a chance to play games with the tester. The procedure for establishing rapport varied with the child, according to his willingness and ease in the situation. Dolls or story books were used initially, and several



FIGURE 1  
RELIGIOUS SYMBOL PICTURE (SYNAGOGUE)

animal pictures which stimulated story-telling on the part of the child preceded the test pictures. These materials were used at the end of the interview for children who showed great involvement in the test.

At the first session, four test pictures were presented in the following order: a preliminary picture, the Negro Barrier Picture, the Catholic Mass Picture, and the Synagogue Picture. The preliminary picture served as a transition from the play materials to the interview. It pictured one child crying and several other children standing near him. Questions asked for an interpretation of the scene ("Tell me about the picture"), and gave the subject a chance to involve himself ("Did it ever happen to you?").

For the second session, the sample was divided into three groups. Division of the sample was necessary in order to avoid an excessive amount of testing for each child. The sample was divided by assigning the children in each grade in each school to an *A*, *B*, or *C* test group in the order in



FIGURE 1  
RELIGIOUS SYMBOL PICTURE (CHURCH)

which they appeared on the class list. The three test groups were given the following combination of pictures:

*Group A*

- (1) Negro Non-Barrier
- (2) Protestant Barrier
- (3) Jewish Holiday
- (4) Catholic Church
- (5) Protestant Non-Barrier

*Group B*

- (1) Negro Non-Barrier
- (2) Jewish Barrier
- (3) Church picture—half the children were given Catholic Church, half were given Protestant Church
- (4) Jewish Non-Barrier

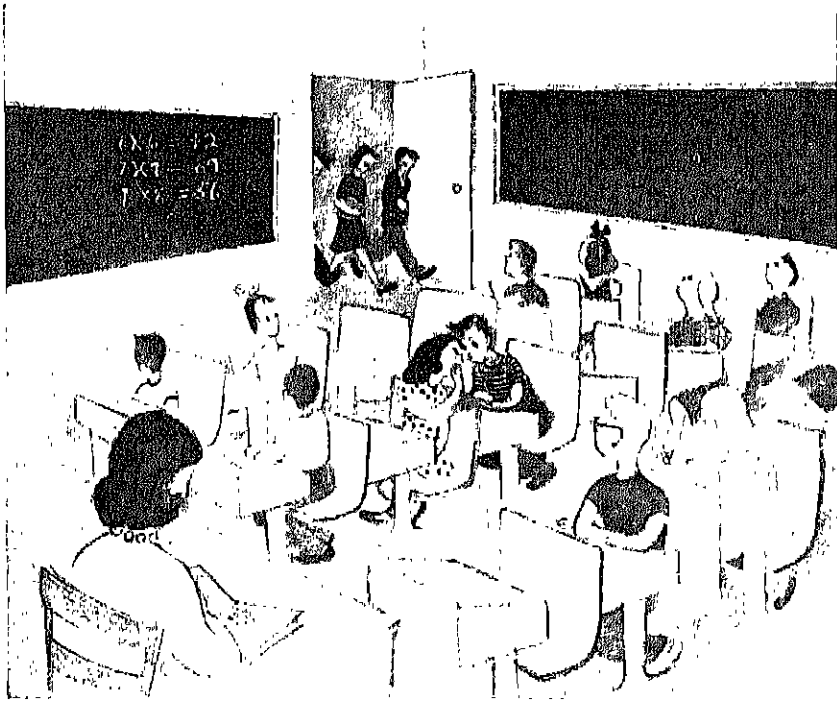


FIGURE 1  
CULTURAL OBSERVANCE PICTURE (Mass)

Group C

- (1) Negro Non-Barrier
- (2) Catholic Barrier
- (3) Jewish Holiday
- (4) Protestant Church
- (5) Catholic Non-Barrier.

In the course of the two sessions each child had Barrier and Non-Barrier Pictures for Negro-white and one religious group, one church picture and the synagogue picture, and one or both Cultural Observance Pictures.

In order to facilitate rapport and ease in discussing race and religion, and in order to avoid undesirable influences by the tester, certain conditions in the testing situations were essential: A friendly, permissive atmosphere was sought. The training of the testers prepared them to handle unemotionally the caution, uncertainty, or anxiety on the part of the child which

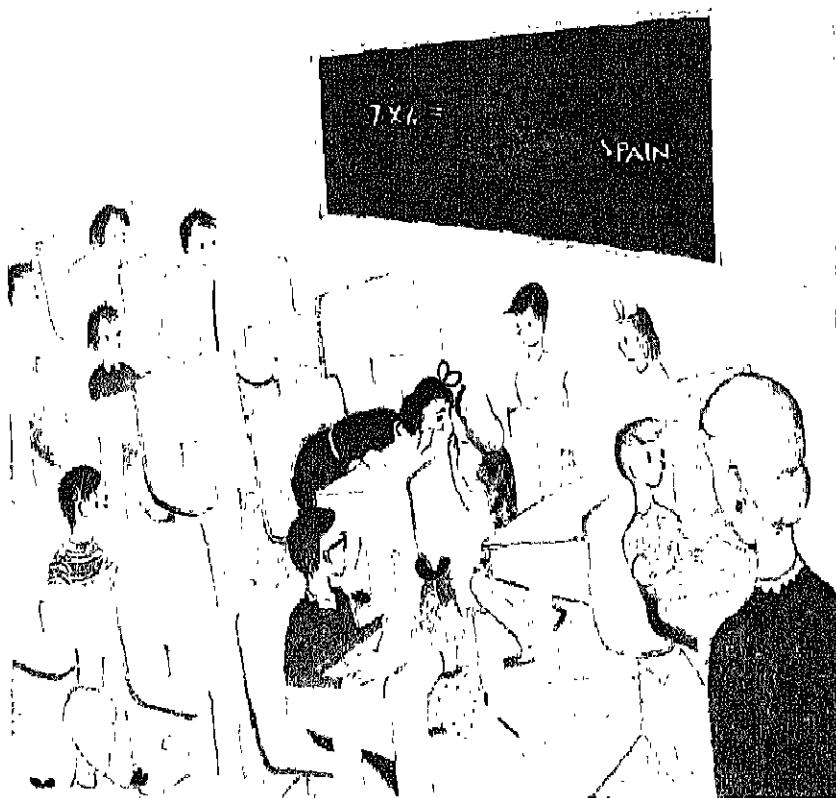


FIGURE 1  
CULTURAL OBSERVANCE PICTURE (JEWISH HOLIDAY)

the topics of race and religion frequently evoked. The tester showed a matter-of-fact attitude in pointing out group factors. He accepted the child's responses uncritically. He asked the questions carefully, avoiding suggestion of a given response by inflexion of voice or facial expression. The Negro children were tested by a Negro examiner, and the white children by white examiners. In cases of irritability, anxiety, boredom, the test was temporarily interrupted until rapport and interest were re-established.



#### IV. SAMPLE TEST RECORDS

To give concreteness to later discussions of test data, several examples are quoted below with comments (Table A). These comments concern (a) the manner in which the responses are influenced by the structure of the pictures, (b) the effects of group identification upon the responses, (c) the vagueness or clarity of concepts of groups, (d) the attitudes and values about groups, and (e) the amount of ego-involvement shown by the child:

TABLE A  
GIRL, KINDERGARTEN, WHITE, PROTESTANT, SCHOOL 4

<i>Comments</i>	<i>Race Barrier Picture</i>	<i>Interview</i>
A friendly social situation is described.	1. (Show picture) TELL ME ABOUT THIS PICTURE.	Well, they are playing ball.
	2. (Pointing to colored boy) TELL ME ABOUT THIS LITTLE BOY.	He is coming to watch them.
	3. HE ISN'T PLAYING. WHY ISN'T HE PLAYING?	Because he didn't know they were playing and he just came down and saw them.
The boy's not playing is the result of circumstances, not wilful exclusion by the group.	4. (Point to children playing) WHY DON'T THEY ASK HIM TO PLAY?	Because I think they have too much boys now, and if they put the girl out of the game . . .
	5. If colored-white has not been clearly specified in preceding questions, describe picture by saying: THIS IS A COLORED BOY, THESE ARE WHITE CHILDREN. Make certain that the child has understood the identification you have made.	
Tester's reference to "colored" elicits stereotypes. This is in contrast to the child's apparent unawareness of colored when discussing the play scene.	5a. IS THIS LITTLE BOY GLAD HE IS COLORED? WHY?	No. Because white children don't like coloreds because they fight too much.
	5b. WOULD HE SOMETIMES WANT TO BE A WHITE BOY? WHY?	Yes. Because white boys do more things than coloreds. More gooder things.

TABLE A (continued)

<i>Comments</i>	<i>Race Barrier Picture</i>	<i>Interview</i>
More prejudiced generalizations appear.	5c. IS SHE (subject) GLAD THAT SHE IS A WHITE GIRL? WHY?	Yes. (Doubtfully) Because white girls do more than colored girls.
	5d. WOULD SHE SOMETIMES WANT TO BE A COLORED GIRL?	Yeah. Because colored girls go away from their family more and go downtown more. More money.
Other associations about colored bring out an advantage in being colored.	6. (Point to colored boy) WHY ISN'T THIS LITTLE BOY PLAYING?	Didn't I tell you already! Because they started and he didn't know about it, and he walked around and saw them and came to watch.
She does not carry over her ideas of whites being better than Negroes to white children excluding Negro child in play. Her stereotype of Negro may still be in a fluid state, felt only weakly.	7. (Point to children playing) WILL THEY ASK HIM TO PLAY? WHY NOT?	No. Because they already started. Well, they will ask him to play if they think that girl can't catch and they think he can more than she.
	8. (Point to boy and to children) WOULD HE LIKE TO PLAY WITH THEM?	Yeah.
	9. WILL HE ASK THEM TO LET HIM PLAY? WHY?	If he gets a chance to. Because he likes to play and he don't have nobody to play with.
<i>Mass Picture</i>		
She perceives in the picture a meaningful social situation.	1. (Show picture) TELL ME ABOUT THE PICTURE.	Well, that's in school and these children are coming in late. And the teacher scolds them.
	2. (Point) THESE CHILDREN ARE COMING IN LATE. THEY ARE CATHOLIC CHILDREN WHO WENT TO MASS. THAT'S WHY THEY ARE LATE.	
	2a. WHAT IS CATHOLIC?	

TABLE A (continued)

Comments	Race Barrier Picture	Interview
"Catholic" is vague in content but differentiated from Protestant. She is certain, however, to which of the groups she belongs.	Catholic? I don't know much about Catholic because we are Protestant. Nobody in my family used to be Catholic—not even my mother. Oh, I don't know my ownself.	2b. DO YOU KNOW ANY CATHOLIC CHILDREN?
There is implied knowledge that "going to Mass" means "going to church." She uses picture structure in finding reasons for the preferences she expresses.	Yes. 3. (Point to latecomers) ARE THEY GLAD THEY'RE CATHOLIC? WHY NOT?	No. Because they have to go to church and they get late for school.
She extends the meaning of Protestant to include church. No feelings are indicated.	4. WOULD THEY SOMETIMES WANT TO BE PROTESTANT? WHY?	I think so, yes. Because they don't have to go to church every morning pretty near.
She reiterates the theme of "more money" which she expressed in the Race Barrier and expands concept of "Catholic" again to include frequent attendance at church.	4a. TELL ME, WHAT IS PROTESTANT?	Protestant? All I know is the name of the church is Protestant, I don't know nothing.
	4b. DO YOU KNOW ANY PROTESTANT CHILDREN?	No. A little bit.
	5 (Point to latecomers) THESE CHILDREN ARE CATHOLIC. (Point to others) WOULD THESE PROTESTANT CHILDREN SOMETIMES WANT TO BE CATHOLIC? WHY?	Yes. Because Catholic have more better churches because the Catholic bring more money because they go in the morning, afternoon, and after school, and all.

TABLE A (continued)  
 Girl, First Grade, White, Catholic, School 2

Comments	Religious Barrier Picture (Protestant Minority)	Interview
Memory of Race Barrier Picture determines response, although foreground boy is now white.		1. TELL ME ABOUT THIS PICTURE. Playing ball.
		2. (point to boy on outside) TELL ME ABOUT THIS LITTLE BOY. He's watching them.
		3. HE ISN'T PLAYING. WHY ISN'T HE PLAYING? Cause he's colored.
		4. (Point to children playing) WHY DON'T THEY ASK HIM TO PLAY? Because they're white and he's colored.
She places Protestant in the area of church, and distinguishes it from Catholic.		5. THIS LITTLE BOY IS PROTESTANT. THESE CHILDREN AREN'T PROTESTANT.
		5a. WHAT IS PROTESTANT? When you go to a different kind of church than Catholic and you don't go to church, you go to Sunday School.
She identifies herself as Protestant; however, she is Catholic.		5b. DO YOU KNOW ANY PROTESTANT CHILDREN? I'm Protestant. And my cousin (Names several others.)
		6. IS THIS LITTLE BOY GLAD HE IS PROTESTANT? WHY? Sometimes he is, and sometimes he isn't. He sees the Catholics go to church and his Sunday School has off, and he likes to go to church.
She expresses no clear preference for either Catholic or Protestant. She is aware of difference but the difference does not imply a better or worse than.		7. (Pointing to children playing) WHAT ARE THESE CHILDREN? (If no group identification is given, say: THEY ARE CATHOLIC CHILDREN, and continue according to schedule. If child gives another group, cross out Catholic from 8 to 11 and use group supplied by child.)
		They're Catholic. Some days they like to be Protestants too. They go to confession on Saturdays and we don't have to.
		8. WOULD HE SOMETIMES WANT TO BE CATHOLIC? Yes, he would.
		9. TELL ME, WHAT IS CATHOLIC?

TABLE A (continued)

<i>Religious Barrier Picture</i> (Protestant Minority)	
<i>Comments</i>	<i>Interview</i>
	Means when you're supposed to go to church and when you're supposed to go to confession to tell your sins.
	10. (Pointing to children playing) WOULD THIS BOY WHO IS CATHOLIC SOMETIMES WANT TO BE PROTESTANT? WHY?
	Yes, because when the Protestants have church, well, they don't.
	11. IS HE GLAD HE IS CATHOLIC? WHY?
	Sometimes, sometimes not. When Protestants have school, they don't.
	12. (Pointing to boy on outside) WHY ISN'T THIS LITTLE BOY PLAYING?
She accepts, for the moment, the religious barrier suggested by parallelism to Race Barrier Picture.	Because they're different. Some are Catholic and one Protestant.
	13. WILL THEY ASK HIM TO PLAY? WHY?
	Yes. Because they're friends. All children like to play.
Then she returns to the point of view which has characterized her response to the picture up to this point. Friendly relations between Catholic and Protestant children are projected.	14. (Pointing to boy and to children) WOULD HE LIKE TO PLAY WITH THEM?
	Yes.
	15. WILL HE ASK THEM TO LET HIM PLAY? WHY?
	Yes. Because he likes to play with Catholics and Catholics like to play with him.
BOY, SECOND GRADE, WHITE, JEWISH, SCHOOL 5	
<i>Synagogue Picture</i>	
<i>Comments</i>	<i>Interview</i>
	1. (Show picture) TELL ME ABOUT THIS PICTURE.
He identifies Hebrew school before description by tester. He sees all the boys as belonging to the Hebrew school.	Well, these two children are coming out of the Hebrew and these others are waiting to go in.
	2. WHAT ARE THE BOYS GOING TO DO? (Indicate both groups).
	(See question 1.)

TABLE A (continued)

<i>Comments</i>	<i>Synagogue Picture</i>	<i>Interview</i>
		1. THIS IS A SYNAGOGUE WHERE JEWISH PEOPLE PRAY. THESE BOYS (point) ARE COMING FROM HEBREW SCHOOL. THEY ARE JEWISH BOYS. WHAT ARE THEY GOING TO DO NOW? WHY?
		(See question 1.)
The question on being Jewish brings out various pleasant experiences associated with being Jewish.		4a. ARE THESE BOYS GLAD THEY ARE JEWISH? WHY OR WHY NOT?  Yes. Because they like to go to synagogue and pray to God. And then when there's certain holidays sometimes the shules give them parties.
This is consistent with his response in 4a; the boys like being Jewish.		4b. DO THEY SOMETIMES WANT TO BE CHRISTIAN? WHY OR WHY NOT?  No. Because they like to be Jewish.
		5. (Pointing to Jewish boys) WHAT ARE THEY GOING TO DO?  Going back home.
Relations between groups of boys are changed by tester's identification of boys as "not Jewish." "Not Jewish" is interpreted by the child as Catholic. Hostility is projected, where earlier it was a friendly situation.		6. (Pointing) THESE BOYS ARE NOT JEWISH. WHAT ARE THEY GOING TO DO? WHY?  I think they're going to beat them up because the Catholics don't like the Jewish people.
		7a. ARE THESE BOYS GLAD THEY ARE NOT JEWISH? WHY OR WHY NOT?  No. Because they want to be Jewish but God kept them from being Jewish. They want to be Jewish because the Jewish people have fun and the Catholic people don't.
He ascribes causation to group belonging. Jewish is seen as advantaged and Catholic as disadvantaged. He does not identify himself as belonging to Jewish group.		7b. WOULD THESE BOYS SOMETIMES WANT TO BE JEWISH? WHY OR WHY NOT?  Yes. Because they would like to be Jewish because the Jewish people have lots of fun and they don't, and they want to be like the Jewish people and enjoy themselves, too.
		8. ARE THEY FRIENDS? (Pointing to both groups.)

TABLE A (continued)

<i>Comments</i>	<i>Synagogue Picture</i>	<i>Interview</i>
He does not accept the idea of friendship between the two groups of boys who are viewed as part of two hostile groups. Group hostility goes beyond the picture to Jewish and Catholic people.	No. Because these are Jewish people and the Catholic people don't like the Jewish people and the Jewish people don't like the Catholic people. They're just like enemies.	9. (If negative) WHY NOT? (See Question 8.)
BOY, SECOND GRADE, WHITE, GREEK CATHOLIC, SCHOOL 4		
<i>Comments</i>	<i>Race Non-Barrier Picture</i>	<i>Interview</i>
He picks out racial difference immediately.	1. TELL ME ABOUT THIS PICTURE. One colored kid is playing with the other kids.	
He rejects friendliness in structure of picture and projects hostile feelings into both white and colored children.	2. THESE CHILDREN ARE ALL PLAYING TOGETHER. THIS LITTLE BOY (Point) IS COLORED. THESE AREN'T COLORED. IS THIS LITTLE BOY GLAD HE IS COLORED? WHY?	
His change from "nigger" to "colored" suggests his trying to conform to tester's standard.	No. He don't like to play with these kids. The white don't like nigger kids—colored kids.	1. WOULD HE SOMETIMES WANT TO BE SOMETHING ELSE? Yes.
He sees the colored child as wanting to be white but white child as satisfied with being white.	4. WHAT WOULD HE LIKE TO BE? White.	
	5. (Pointing) THESE CHILDREN AREN'T COLORED. WOULD THIS BOY SOMETIMES LIKE TO BE SOMETHING ELSE?	
	No.	
	6. WHAT WOULD HE LIKE TO BE? (Not asked.)	
	7. WHAT ARE THESE CHILDREN GOING TO DO? Play somewhere else.	
He denies the structure of the picture and creates a new situation where bad relations obtain between Negro and white children. He injects stealing by Negro child as the cause for white children's having to play elsewhere.	8. ARE THEY FRIENDS? WHY? No. Because when colored wanted to play, he came to play with the white. But he wants to steal the ball. That's why the white kids have to go somewhere else.	





## V. EVALUATION OF SOCIAL EPISODES TEST

The data from the Social Episodes Test are not wholly self-explanatory. Two main questions arise in the interpretation of the data from the Social Episodes Test. Since, as in any test, the data obtained are a function of both the stimulus situation and the personality organization of the child, one problem of analysis concerns the manner in which the structure of the pictures determines the character of the responses, and a second problem concerns the meaning of the data in terms of the underlying attitudes and behavior of the child.

The first problem, that of the influence of the picture test upon the responses of the children, was analyzed with references to the following questions: (a) What is the meaning of the pictures before race and religion are identified by the examiner, and how are the interpretations of the pictures altered by these identifications? Before identification by the tester, the pictures almost always inspired some spontaneous story themes from the children. Many of the themes are of the simplest descriptive variety such as "There are children playing ball" or "The teacher is telling the children to work." Only a small proportion of the interpretations (between 15 per cent and 21 per cent) are unfriendly or hostile (Table 3). Relatively few children refer to race or religion, even when group symbols appear in the pictures (Table 4).

In each picture, identification of race or religion by the tester results in increased projection of hostility and rejection (Table 3). This effect is most marked in the Race Barrier Picture: after identification, "Why isn't

TABLE 3  
INTERPRETATION OF SOCIAL INTERACTIONS BEFORE AND AFTER RACE AND RELIGION ARE IDENTIFIED BY TESTER  
(Percentage\* of children)

Interpretation of interaction	Kindergarten		1st Grade		2nd Grade		Total	
	Before	After	Before	After	Before	After	Before	After
Race Barrier—								
Friendly	2	14	0	8	0	6	4	9
Exclusion	8	34	19	52	16	60	15	50
Synagogue—								
Friendly	17	18	12	10	16	20	15	16
Hostile	17	14	21	30	23	44	21	31
Churches—								
Friendly	18	20	11	17	14	21	14	19
Hostile	14	20	16	25	31	40	20	29

\*These percentages include only the children for whom friendly, hostile, or rejecting attitudes were explicit in their responses.

TABLE 4  
APPEARANCE OF RACE OR RELIGION IN CHILDREN'S RESPONSES BEFORE THE IDENTIFICATION  
OF THESE GROUPS BY TESTER  
(Percentage of children)

	Mention of race	Mention of religion
<i>First session</i>		
Race Barrier Picture	8	.4
Mass Picture	0	0
Synagogue Picture	0	8
<i>Second session</i>		
Race Non-Barrier Picture	7	0
Religious Barrier Picture	26	.8
Jewish Holiday Picture	4	3
Church Picture	.8	11
Religious Non-Barrier Picture	.4	5

this little boy playing?" is answered in terms of exclusion by 50 per cent of the subjects, compared with 15 per cent before reference to race. The increase in hostility on religious pictures is less marked—about 10 per cent on both the synagogue picture and the church pictures. Changes in explicitly friendly responses with group identifications are negligible.

Thus, with respect to feelings of rejection and hostility, important variables in the data on children's inter-group attitudes, the pictures alone do not account for the heavy load of dislike and hostility in the responses. It is the picture plus a group label which stimulates most of these projections.

(b). On retest situations in which the same group identifications are applied to different pictures, do the responses regarding the particular group remain essentially the same in content and affect or do they vary with the picture? The test and retest interviews which are quoted below of one child, on one group, illustrate the kind of independence of many of the responses from specific picture structure (Table B).

Though such exact repetition of ideas and feelings is unusual, a general constancy of attitude appears in the sample as a whole on the test and retest though the group content is imbedded in different pictures. Statistical comparisons have been made for the entire sample. Figure 2 presents the rating of feeling—rejecting or accepting—which the child expresses on two pictures toward each group (Table C). The feelings expressed on the two pictures are essentially similar. Acceptance or rejection of group seems to be relatively independent of picture structure.

Figure 3 presents responses to one question which appears on two pictures of each group. Again the results from different pictures are similar.

When the question in Figure 3 is analyzed according to the proportion

TABLE B  
BOY, SECOND GRADE: 1st Session, Synagogue Picture

1. (Show picture. Allow response.) TELL ME ABOUT THIS PICTURE.  
These two men are coming out of this here United States house and come across to them boys.
2. WHAT ARE THE BOYS GOING TO DO?  
(See Question 1.)
3. THIS IS A SYNAGOGUE WHERE JEWISH PEOPLE PRAY. THESE BOYS (point to Jewish boys) ARE COMING FROM HEBREW SCHOOL. THEY ARE JEWISH BOYS.  
There is one Jewish boy I know named David.
- 3a. TELL ME, WHAT IS JEWISH?  
Jewish means that the face is all like Jewish.
- 3b. ARE THESE BOYS GLAD THAT THEY ARE JEWISH? WHY OR WHY NOT?  
Yeah. No, they ain't. Because the Jews killed God; but God still helps them.
4. WOULD THEY SOMETIMES WANT TO BE CHRISTIAN? WHY OR WHY NOT?  
Yes. I don't know, but . . .
- 4a. TELL ME, WHAT IS CHRISTIAN?  
I never heard of it before. I heard of it, but I don't know it.
- 4b. WHAT IS GENTILE?  
It means you like a kid and he is good to you. When he has a piece of candy, he gives it to you. I have a big picture of God upstairs in my room; I always pray I'll never be bad or selfish or something like that.
5. (Pointing) THE JEWISH BOYS ARE COMING OUT OF HEBREW SCHOOL. WHAT ARE THEY GOING TO DO?  
Going over to play with these boys.
6. (Point to other boys) THESE BOYS ARE NOT JEWISH. WHAT ARE THEY GOING TO DO?  
Beat them up.
- 6a. ARE THEY GLAD THAT THEY ARE NOT JEWISH? WHY OR WHY NOT?  
Yes. Because Jewish killed God and they don't like the Jewish.
- 6b. WOULD THESE BOYS SOMETIMES WANT TO BE JEWISH? WHY OR WHY NOT?  
Yeah. Because sometimes they want to play with the Jewish kids. That's what I do. I play with that kid named David.
7. (Point to both groups) ARE THEY FRIENDS? WHY OR WHY NOT?  
Yeah. Because sometimes they play with them and sometimes they play and then they forget all about it if they are Jewish or if they are not Jewish. That's what I did.

2nd Session, Jewish Holiday Picture (same child)

1. TELL ME ABOUT THIS PICTURE.  
The teacher standing up in front, girls talking to each other, etc.
2. IT'S A JEWISH HOLIDAY AND SOME OF THE CHILDREN ARE ABSENT. (Point to empty seats) THE JEWISH CHILDREN DID NOT COME TO SCHOOL BECAUSE OF THE HOLIDAYS. WHAT IS JEWISH?  
Jewish is the kind of kid who's a Jew.
3. DO YOU KNOW ANY JEWISH CHILDREN?  
I know a kid named David. He's a Jew. That ain't nice to say. WHY?  
'Cause some of them play with Jewish—I even play with them.
4. ARE THESE CHILDREN WHO ARE ABSENT GLAD THAT THEY ARE JEWISH? WHY?  
Yes. I don't know.
5. WOULD THEY SOMETIMES WANT TO BE CHRISTIAN?  
Yes.
6. TELL ME, WHAT IS CHRISTIAN? DO YOU KNOW ANY CHRISTIAN CHILDREN?  
Don't know. I don't know if they are or ain't. I think there is a kid.
7. THESE CHILDREN IN SCHOOL ARE NOT JEWISH. ARE THEY GLAD THEY ARE NOT JEWISH? WHY?  
Yes, 'cause Jewish sometimes get different faces and Jewish do different things. WHAT KIND OF THINGS? They see something and say let's buy it. They don't want to miss anything.
8. WOULD THEY SOMETIMES WANT TO BE JEWISH?  
Yes. WHEN? When on Jew day.

EXPRESSED FEELINGS OF ACCEPTANCE OR REJECTION toward racial and religious groups, comparing responses on first and second interview sessions

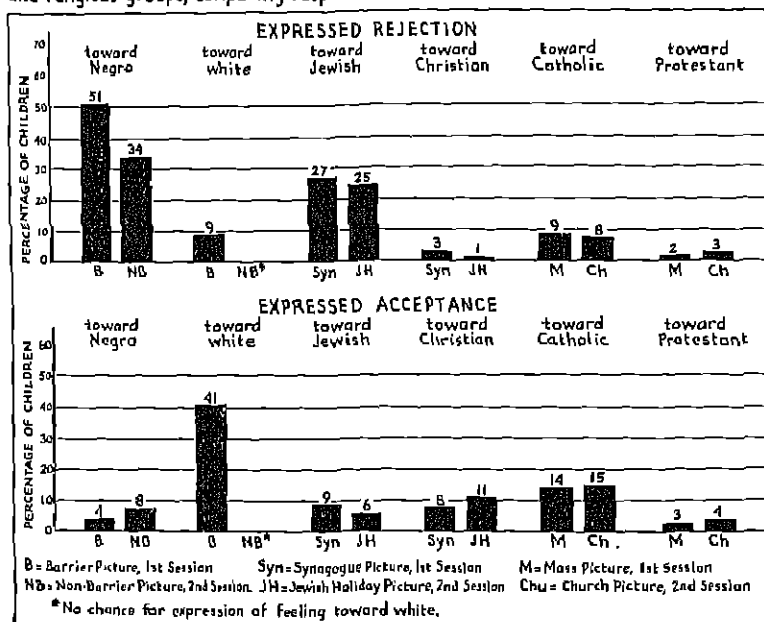


FIGURE 2

of children who give the same answer ("yes" or "no") on both occasions (i.e., each child compared with himself) the following results were obtained: In answer to the question "Is the colored child glad he is colored?" 73 per cent of the white children and 71 per cent of the Negro children gave the same responses on both pictures. Considering all religious groups together, in answer to the question "Is the Jewish (Catholic, Protestant) child glad he is Jewish (Catholic, Protestant)?" 83 per cent of the members of the specified group and 76 per cent of the non-members of the specified group gave the same responses on both pictures.

There are many instances in which consistency of response toward a given group is not found in inter-picture and intra-child comparisons. A search for complete consistency is, however, unwarranted unless it is assumed (a) that on each occasion the child gives the total of his associations about a given group, and (b) that there is a complete crystallization of attitudes about groups in young children.

(c). What are the cumulative effects of the series of pictures upon the

TABLE C

The ratings were made in order to evaluate the data on a level other than one based on the specific content of the answers. The responses are rated along three dimensions: (a) how clear and extensive are the facts associated with group labels, (b) what is the emotional response to them and how deeply is it felt, (c) to what extent are the groups perceived as social units with recognized rôles in social interaction. The ratings scheme is presented below:

Facts regarding ——— group

None  
Vague  
Specific or extensive  
(distorted)

Feelings regarding ——— group

Explicit rejection  
Implied rejection  
Neutral  
Can't classify  
Implied acceptance  
Explicit acceptance

Perception of group relations

(Minority) group rejects (majority) group.  
(Majority) group rejects (minority) group.  
Mutual rejection between (minority) and (majority).  
Friendly group relations between (minority) and (majority).

The reliability of the ratings was established by obtaining independent ratings on 141 sets of ratings, including pictures about each of the groups studied. The agreements on the ratings are as follows (in percentages):

	Facts	Distortion of facts	Feelings	Group Relations
<i>On Mass Picture</i>				
Toward Catholic	84.6	96.2	82.7	100.00
Toward Protestant	90.4	98.1	98.1	
<i>On Church and Synagogue</i>				
Toward Catholic	90.0	95.0	90.0	97.5
Toward Protestant	85.0	97.5	90.0	
Toward Jewish	94.1	100.0	88.2	88.2
Toward Christian	88.2	—	91.1	
<i>On Race Barrier</i>				
Toward Negro	94.1	100.0	88.2	88.5
Toward white	—	—	88.5	

responses? The child's response to any picture is determined to some extent by his perception of the test situation as a whole, and by his remembrance of preceding pictures and questions. The context in which he sees the third picture is different from that of the first.

One series effect is evident in the increase in the number of times the child himself structures the picture in terms of race or religion (Table 4). The increase in group references from first to second interview session is

Figure 3. Comparison of responses to identical questions on two pictures:  
 "Does \_\_\_\_\_ want to be \_\_\_\_\_?" first and second sessions.

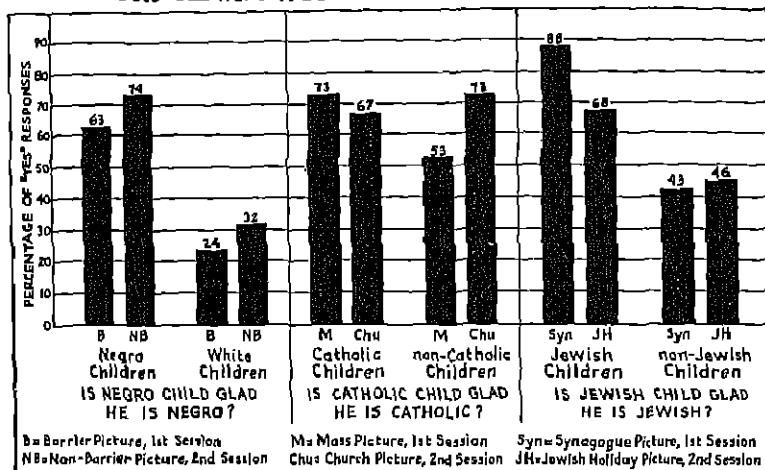


FIGURE 3

evident in the following comparisons: On the Race Barrier Picture Negro is mentioned in 8 per cent of the cases in initial interpretations. When the Religious Barrier Picture is presented in the second session, 26 per cent of the children inappropriately carry over racial distinctions in their descriptions of the picture. Race is seldom carried over to the other pictures on religious groups. There is no increase in mention of race from Barrier Picture to Race Non-Barrier Picture on second session.

References to religious groups show only a small increase from first to later pictures in the series. Where these references occur spontaneously in greatest frequency, however, religious symbols are part of the picture. The increase cannot be attributed wholly to a series effect.

Only one specific effect of earlier pictures upon later pictures in the series appears in the children's interpretation of social interaction. This is the conspicuous carry-over of an "exclusion situation" from the Race Barrier to the Religious Barrier Pictures. While on the Race Barrier, only 3 per cent of the children describe exclusion of child because he is Negro, before the tester asks, "Why isn't he playing?" on the Religious Barrier this description occurs in 19 per cent of the cases. Allowance must be made for this effect in the interpretations of the Religious Barrier Pictures.

Just as the child's response to any one picture is affected by his percep-

tion of the whole test situation and by his memory of preceding pictures, so the interpretation of a particular response is influenced by the general tone of responses which the child gives. For example, projection of hostile interaction between groups means one thing when it comes from a child who sees hostility everywhere; and before as well as after group is a part of the stimulus situation, it may have quite a different meaning when it comes from a child who inclines to project friendly relationships except where a particular group label appears.

Some data are obtained only through study of the series as a whole: the breakdown of inhibitions preventing discussion of race or religion, the appearance of dominant ideas or preoccupations in the child's thinking, the elaboration of ideas on a group from one picture to another, and the comparison of responses toward the several groups. These aspects have been given attention in the analysis.

From the preceding evidence on the influences of the picture structure, it appears that, while the pictures and questions do not determine the cognitive and affective content, they fulfil the important function of placing a group reference in a situation which is sufficiently fluid to allow the child to be selective in his perceptions and to project his own needs into the interpretations.

The second question on evaluation of the data from the Social Episodes Test concerns the meaning of the responses in the personality organization of the child. To explore this problem it is necessary to anticipate the findings which are discussed in later chapters and to ask the nature of the responses. The names or symbols of groups in the pictures elicited from a large percentage of the children responses which indicate some knowledge, ideas, or feelings about these groups. This awareness ranges from 33 per cent of the kindergarten on the Jewish Holiday Picture to 94 per cent of the second grade on the Race Barrier Picture. The meanings of each of the groups differ markedly from one another. The meanings given, in many instances, go beyond suggestions from the pictures. The choice of content is not childish imaginative content but is rather a more or less faithful reproduction of the patterns of group prejudice in the adult culture. It is important to determine the significance of this content in the child's concept formation, in the development of his attitudes and values, in the process of his socialization, as a source of insecurity for him, as an outlet for his aggressions.

The ideas which children introduce about groups (e.g., "He wants to be Catholic because Catholics learn all about God"), the emotions which they give as their own (e.g., "They going to run. They scared of Jews") may be

taken at face value as expressions of ideas and feelings with which the name of the group inspires them. One cannot tell, however, how deeply these fears and antagonisms are felt, or how rigid or yielding they are to re-education. Nor can one easily tell how much the child's expressed attitudes toward groups are attached to vague abstractions and how much they stem from experience with particular individuals or institutions. Just as a child may tell stories of "hundreds" or "millions" of years ago when he has no clear concept of time, so too his comprehension of group differentiations may lack concrete reference. Group identifications may have reality for him on the "million years" level in which "colored" or "Catholic" or "Italian" belongs to the realm of things and people which is not his own, to things which are "bad" or "strange." Familiar people in his school or in his neighborhood, or his friends, may not be perceived in such terms.

At the other extreme is the child whose responses reflect a sophisticated differentiation of groups based on hard, daily-met realities. He not only makes explicit references to real persons and experiences but also makes the adult distinctions between the group in general and particular members of the group [e.g., "Maybe they hate each other (Jews and Italians) but they know the person"].

Because the child's expressions are often unclear or lack concrete reference does not mean that they are unimportant in his development, or that they can be dismissed as mere "benign verbalizations" (5, p. 357). On the contrary, these early learnings inevitably form the basis of later attitudes and beliefs. A concept or social attitude does not ordinarily emerge fresh and new when the child is old enough to understand fully. Instead, differentiation takes place gradually, and the first approximations and feelings are likely to play an important rôle in the outcome.

The preceding illustrations and theories define the problems of this research, and in the following discussions the data from the picture test are analyzed with reference to them.



## VI. CHILDREN'S SOCIAL PERCEPTIONS OF NEGRO AND WHITE

### (Responses to Race Barrier and Non-Barrier Pictures)

Research (1, 7) has shown that children of preschool age can distinguish Negro and white on a perceptual level and, further, that very often they express feelings of like or dislike toward one or the other race. Anecdotal data reveal evidence of quite another kind: an example is cited of a white child, whose playmates include both Negro and white children, who was puzzled when asked to specify the color of a playmate in absentia. Similarly, the Negro child for whom the friendly world has been a Negro world and to whom the white population is known only as hostile and threatening may have difficulty in accepting the fact that the white teacher in his school, who is a friendly person, is not really Negro too.

Thus, it appears that whereas dark- and light-skinned people are readily distinguished when the child is confronted with a perceptual test, this perception can be altered by social and emotional factors which either diminish the salience of skin color, or magnify it and link it with various kinds of approach and avoidance behavior. It is this level of social perception of Negro and white that is here studied through the child's organization of the social situations in the pictures. Some questions which are raised on social perceptions of race are: What are the expectations of children in social situations which include Negro and white? To what extent are children aware of cultural values and stereotypes of race and to what degree have they accepted them? How unformulated or crystallized are their attitudes about race?

### A. INTERPRETATIONS OF PLAY SITUATION IN RACE BARRIER AND NON-BARRIER PICTURES

The Race Barrier Picture presents two stimuli regarding race. The first is *relatively weak*; it is the pictured blackness of the boy in the foreground contrasted with the whiteness of the children playing. The second, more obvious, is the identification of colored and white by the tester.

In response to the first stimulus, few children bring race into their interpretations: 12 per cent of the white children and 2 per cent of the Negro children (Table 5). For these children, race is a significant factor in the social situation portrayed and on first sight of the picture they respond by pointing out, "This is a little nigger boy" and "He's jumbo. You can always tell by his hair."

TABLE 5  
INTERPRETATION OF RACE BARRIER PICTURE\* BEFORE AND AFTER RACIAL IDENTIFICATION  
OF CHILDREN  
(Percentage of children)\*\*

Interpretation of play situation	Before identification		After identification	
	Negro	White	Negro	White
A. GROUP EXCLUDE PERIPHERAL BOY.				
1. "They don't want him because he's colored."	2	12	41	48
2. "They don't want him."	45	25	23	14
B. PERIPHERAL BOY DOESN'T WANT TO PLAY.				
1. "He doesn't like white boys."	1	0	6	3
2. "He's afraid because they are mean, fresh, will hit him."	7	4	1	3
3. "He doesn't want to play."	48	24	32	17
C. PERIPHERAL BOY'S POSITION EXPLAINED in terms of game requirements or situational factors. ("He has no bat," "doesn't want to stop game," "it is too late," etc)	28	37	22	17
D. PERIPHERAL BOY IS PLAYING, OR IS GOING TO PLAY.	0	1	14	6
E. DON'T KNOW and NO RESPONSE.	13	20	2	7

\*Answers to question: "Why isn't the little boy playing?" and "Will they ask him to play?"

\*\*The percentages are not additive, since a child giving a reason which is classified as *A* or *B* frequently adds an explanation which falls in Category *C*—the child's position on the sidelines is in terms of game requirements, a rationalization such as, "They don't need anybody else in the game." A few children appear in both *A* and *B*.

The children who do not mention race may be unaware of the difference suggested in the picture, or they may see the difference but not consider it relevant to the play theme, or they may see the difference and be afraid to talk about it. Some of the responses, although race is not mentioned, suggest a possible linkage with race. The anticipation of conflict (Category B2, Table 5) in which the Negro child is described as not wanting to play because he "is afraid they will hit him" may be related to race. The perception of rejection ("They don't want him" or "He doesn't want them"), which is extremely frequent, especially among Negro subjects, may be motivated by an awareness of racial prejudice. The extent to which race affects the interpretations at this point can only be inferred from the later responses.

After the tester draws attention to race, one is left with little doubt that for a large proportion of the children, whether or not they have been confronted with this situation in real play, racial difference affects their per-

ceptions of the play scene and calls out many expressions of attitudes, fears, and conflicts. Fifty-one per cent of the white children and 47 per cent of the Negro children now interpret the boy's not playing in racial terms. When responses to all the questions on the Barrier Picture are considered, race appears in the projections of 92 per cent of the white children and 67 per cent of the Negro children. That these responses reflect more than the child's chance selection and more than a priming by the examiner's questioning is plainly shown in the children's elaborations which describe community mores, norms of behavior between the races, sanctions from authority, and feelings of personal aversion. The following excerpts illustrate:

*White child, second grade*

"Because he is colored and don't want to play with white boys, and white people don't want to play with him because they know he cheats and is too tough."

(WILL THEY ASK HIM TO PLAY?) "All of them go away and leave this little boy alone. That's what always happens around my street."

*White child, kindergarten*

"A colored boy is in our neighborhood and we don't play with him. I don't trust them. A colored boy pulled my hair in this school, so I ain't playing with no more niggers."

*White child, kindergarten*

"I know (the little boy is colored). We have colored people in our neighborhood. My father wants to get out of that neighborhood because he doesn't like colored people."

*Negro child, second grade*

"They won't let him play. They don't like colored."

*Negro child, first grade*

"Colored boy can't play with whites."

There are many more Negro children (33 per cent) than white children (8 per cent) who do not at any time mention race in their interviews. It seems likely that this difference arises from an inhibition and avoidance on the part of the Negro children rather than from a lack of concern or awareness about race. The Negro children are anxious to avoid the subject of race, which to them is painful. This theory is supported in several ways: (a) A number of the Negro children show discomfort when "colored" and "white" are mentioned by the tester. On the test record of a kindergarten child the tester (Negro) comments, "A very quiet child, didn't want to talk. He rejected the first picture as soon as the colored child was pointed out to him. He answered the rest of the questions (on the picture) rapidly

without looking at the picture." (b) When asked to identify with the Negro child and the white child in the picture and to tell why each wants to be or does not want to be Negro or white, the meaningless or irrelevant responses persist at each age level among the Negro children (13 per cent in kindergarten, 18 per cent in first grade, 13 per cent in second grade). Many of these irrelevancies indicate inhibition, conflict, or discomfort created by the questions. In contrast to the Negro children, the white children show a sharp decrease with age in the meaningless responses (20 per cent in kindergarten, 13 per cent in first grade, 0 per cent in second grade). The social taboo against discussing race appears in some of the white children but it tends to give way quickly when the tester brings the topic into the open.

Since race and age are likely to affect the kinds of experiences to which the child is exposed and his reactions to them, race and age variables are considered in the analysis of the interpretations of the pictures. Differences related to race and age are apparent in the interpretations of why the little boy is not playing. That the child on the sidelines is not allowed to play because he is Negro appears as an explanation with the frequency given in Table D (Categories A1, Table 5) (Table D).

TABLE D

	Among Negro children	Among white children
Kindergarten	48%	34%
First grade	34%	43%
Second grade	43%	61%

The explanation that the Negro child in the picture refuses to play because the other children are white appears as given in Table E (Category B1) (Table E).

TABLE E

	Among Negro children	Among white children
Kindergarten	4%	0%
First Grade	0%	2%
Second grade	11%	6%

The change with age among the white children is in the expected direction of increasing awareness or acceptance of the prevailing pattern of prejudice against the Negro. There is a suggestion of increasing defensive reactions on the part of Negro children in saying the Negro child in the picture refuses to play with white children.

When responses do not require verbal formulation of white discrimination, but only "yes" or "no" answers as in the question "Will they ask him to play?" (Table 6), it becomes apparent that the Negro children as well as the white children perceive exclusion increasingly with age. The chil-

TABLE 6  
RESPONSES OF "No" TO THE QUESTION: "WILL THEY (WHITE) ASK HIM (NEGRO)  
TO PLAY?"  
(Percentage of children)

Grade	Negro children	White children
Kindergarten	35	43
1st Grade	46	67
2nd Grade	60	75
Total	48	63

dren's perceptions of Negro-white group relations can also be inferred from responses to the pair of questions asking if the white children have rejected the Negro boy and if the Negro boy wants to play with them (Table 7). Both Negro and white subjects see white children rejecting the Negro child at the same time that they say the Negro child would like to play if he were allowed. This reaction increases with age from 17 per cent to 40 per cent among the Negro children, and from 29 per cent to 60 per cent among the white children.

TABLE 7  
RESPONSES TO THE PAIR OF QUESTIONS: "WILL THEY (WHITE) ASK HIM (NEGRO) TO  
PLAY?" AND "WOULD HE (NEGRO) LIKE TO PLAY?"  
(Percentage of children)

Response	Kgn.	Negro children			Kgn.	White children		
		1st Grade	2nd Grade	Total		1st Grade	2nd Grade	Total
White reject and Negro wants to play	17	30	40	34	29	48	60	46
White reject and Negro does not want to play	13	12	20	15	12	16	10	13
White accept and Negro does not want to play	4	0	3	2	2	7	2	4
White accept and Negro wants to play	49	49	34	43	36	21	22	26
One question not answered	17	9	3	9	21	8	6	11

Mutual rejection is not described frequently by either group. The responses of 17 per cent of Negro children who say the Negro child does not want to play may be defensive or aggressive reactions against the white.

Descriptions of accepting attitudes by white and Negro children in the picture (Table 7) appear in 43 per cent of the Negro responses and in 26 per cent of the white responses. In both, the frequency tends to decrease with age (49 per cent to 34 per cent among Negro and 36 per cent to 22 per cent among white subjects).

This response pattern has several possible meanings. It may reflect the child's world of experience; it may indicate his wishes; or it may be a defensive denial of the world as he knows it. It appears to be an expression of wish most often among the Negro children: (They'll ask him to play) "because he wants to play." They interpret the picture only from the point of view of the wishes of the Negro child in the picture, without consideration of the motives of the white children.

In the accepting responses from white children, the child's wanting to play again enters into the reasoning; this suggests a degree of empathy with the Negro child—that he, too, enjoys play and that he would feel bad if rejected. Only a few children express the realization of the hurt involved in rejection, but it is unmistakable in a few cases:

*White child, second grade*

"Yeah (they'll ask him to play). Because he is sad and he wants to play and they feel ashamed for him and they make him play."

A first grader says "Yes, they'll let him play," and then adds, "He's sad 'cause he's colored."

Another second grader decides they will let him play because "they see he is getting angry."

Being able to understand the feeling of the Negro child does not preclude having feelings of prejudice against him. And the same white children who grant him the privilege of playing, elsewhere in the interview project hostility.

Similarly, many of the interpretations of sociability between Negro and white are modified by reservations such as:

"Yes (the white girl would like to be colored), when she sees colored people playing and there is no white people around and she has no one to play with. Some white people do play with colored people. No harm in that."

"Yes (they will ask him to play), they're all the same kind of children only their skin's different."

Although for most of the white children projections of hostility or exclusion of the Negro child are not accompanied by expressed feelings of guilt or of injury done, the beginning of psychological conflict appears. A case in point is the second grade child who, though wavering in his interpretation of the Barrier Picture, says finally, "If you're kind you ask different people to play."

A realization of injury done appears in a kindergartner: "They's a white boy, he calls all colored boys 'niggers'. . . He made all the kids bad. I'm glad he moved away."

Among a few of the older children, the conflict is even more sharply drawn; that is, they state that there is discrimination against Negroes and that this discrimination is "not fair" or "not nice." This occurs once in the first grade, and six times in the second grade—always from white children. Perhaps the most sophisticated statement is from a second grader:

"(He isn't playing) because they won't let him play. If he was a white boy they would let him play. Even if he is colored they should let him play. What's different about him? Maybe he was born in the night and they was born in the day."

"No (they won't ask him to play). He ain't white."

Among the Negro children personal conflict is widespread and serious. Its manifestation in reluctance to talk about discrimination has already been described, but in the reasons which are given why the rejected child will or will not ask to join the play with the white children, the discomfort and conflict are even more apparent—it is because he (Negro child) is afraid of them, he knows they will say no, or they will show some kind of violence toward him (20 per cent of the Negro children). Eight per cent say bluntly: "Colored and white don't play together." Two per cent say the Negro boy does not like white people. (The same categories appear in white children's responses in 14 per cent, 11 per cent, and 3 per cent of the cases respectively.)

Again, conflict of the Negro child appears in the expression of ambivalent feeling toward white. None of the Negro children is, perhaps, sufficiently secure in the test situation to say that white children won't play with colored children, but they should; but they express their resentment of white exclusion by rejecting white in one answer and by reaching out for white acceptance in the next, thus:

*Negro child, kindergarten*

"No (the colored boy doesn't want to be white). I don't like white people."

(He isn't playing) "'cause he wish he was white. I got all white people around my way."

### B. COMPARISON OF BARRIER AND NON-BARRIER PICTURES

The Barrier Picture, by suggesting exclusion of the Negro child, suggests the dominant cultural pattern of racial prejudice. The Non-Barrier Picture, on the other hand, provides a contrasting setting counter to the pattern of prejudice. A comparison of responses to this picture and the Barrier Picture provides a measure of the flexibility or rigidity of attitudes toward race and of degree to which cultural values and conflicts associated with race have been learned by these children.

The responses to the scene of a Negro child and white children playing together are much less verbal than the responses to the Barrier Picture. The initial reaction is usually a low level of simple description or of minimal interpretation, just "They are playing." Seven per cent of the children comment on the Negro boy in the group. After the tester identifies race and asks, "What are they going to do?" 3 per cent of the white children refuse to answer; 5 per cent of the white children and 2 per cent of the Negro children are wholly unable to accept the idea of playing together, and create a new situation which denies the Non-Barrier.

#### *White boy, kindergarten*

THESE CHILDREN ARE PLAYING TOGETHER. THIS LITTLE BOY (point) IS COLORED. IS THIS LITTLE BOY GLAD HE IS COLORED? WHY?

"No. 'Cause everyone calls him 'chocolate bar.'"

WHAT ARE THESE CHILDREN GOING TO DO?

"They're going to make a snowball and wash the colored boy's face with it."

ARE THEY FRIENDS? WHY?

"The white ones—yeah. They don't like him (Negro); they don't want him to play."

#### *White boy, second grade*

THESE CHILDREN ARE PLAYING TOGETHER. THIS LITTLE BOY (point) IS COLORED. IS THIS LITTLE BOY GLAD HE IS COLORED? WHY?

"No. He don't like to play with these kids. The white don't like nigger kids—colored kids."

WHAT ARE THESE CHILDREN GOING TO DO?

"Play somewhere else."

ARE THEY FRIENDS? WHY?

"No. Because when colored wanted to play, he came to play with the white. But he wants to steal the ball. That's why the white kids have to go somewhere else."



The question of the Non-Barrier Picture, "Are they friends?" brings an increase in denial of what the picture portrays. Now 8 per cent of the Negro children and 16 per cent of the white children say "No" and give such responses as, "White are bad to colored," "They (whites) don't like colored," (they are friends) "All but the colored boy." Among the white children who say they are friends, 9 per cent mention race and of them none is unambiguously friendly; thus:

*White girl, second grade*

"Yes (they are friends). Because they're all playing together, and even though he's colored, you can play with him. They'll never hurt you if you're kind to them."

C. RATINGS OF ATTITUDES TOWARD NEGRO AND WHITE

The analysis has been concerned so far with the effects of race differences on the perceptions of the playground scenes. In the children's interpretations of the play scenes there appear many projections of social values and personal feelings which go beyond the confines of the picture. Taking all the associations, judgments, and expressions of attitude which appear in the reactions to the Barrier Picture, each child was rated for attitude of acceptance or rejection, Negro and white. (See Section V, for description of rating procedure.)

These ratings are presented in Table 8 in race and age groups. They show

TABLE 8  
RATINGS ON ATTITUDES OF REJECTION AND ACCEPTANCE OF NEGRO AND WHITE  
(Percentage of children)

Feelings expressed toward Negro				
	by			
	White children		Negro children	
	Rejection	Acceptance	Rejection	Acceptance
Total	68	0	23	11
Kindergarten	63	0	17	35
1st Grade	72	0	30	3
2nd Grade	67	0	17	5

Feelings expressed toward White				
	by			
	White children		Negro children	
	Rejection	Acceptance	Rejection	Acceptance
Total	0	54	22	14
Kindergarten	0	39	26	4
1st Grade	0	72	21	18
2nd Grade	0	45	20	20

The children not represented were rated as neutral, mixed in feelings, or as giving no indication of feelings.

that among both white and Negro children there is far more rejection than acceptance of Negro. This ratio is reversed only among the Negro kindergartners, who are likewise the only group in which there is appreciably more rejection than acceptance of white. Thus the values of the surrounding culture, exalting white and rejecting Negroes, seem to be accepted and internalized by more than two-thirds of the white children, and by a quarter of the Negro children for whom is involved some measure of "self-hatred."

The frequency with which children go beyond the limits of the picture and interpret group relations as they see them in the world around them are given in Table F.

TABLE F

By white children, group relations (beyond the play interactions of the picture) are described as:	
Whites reject Negroes—	53% of the cases
Negroes reject whites —	0% of the cases
Mutual rejection —	10% of the cases
By Negro children, group relations are described as:	
Whites reject Negroes—	23% of the cases
Negroes reject whites —	0% of the cases
Mutual rejection —	20% of the cases

The white group is perceived as the dominant group which is maintaining the prejudice; never is the Negro group alone perceived as doing the rejecting. Mutual rejection is more often seen by the Negro children than by white.

#### D. COGNITIVE STRUCTURE OF RACE

The children were not questioned on the meaning of Negro and white; however, in the course of their interpretations of the pictures many "explanations" of Negro were offered incidentally and spontaneously by the white children. Such responses appear in 33 per cent of the white children's interviews, but in only 2 per cent of the Negro children's interviews. The descriptions are given in Table 9. Though they vary considerably in content, they are of two general types; descriptions of physical characteristics and descriptions of social characteristics.

Responses referring to physical factors are concerned mainly with skin color, which is often seen as the result of temporary conditions—being dirty, getting suntanned—rather than as an inherited characteristic. These notions are illustrated in the remarks of first and second graders:

"He got dirt on his face and his mamma didn't wash him."

"Little boys when they get dirty get into a colored boy and when they get clean they get into a white boy."

"I got brown when I went to Atlantic City."

TABLE 9  
DESCRIPTION OF "NEGRO"  
(Percentage of children)

	Negro children	White children
<i>Physical characteristics</i>		
Dirty and dark skin are equivalent or related	1	13
Dark skin is "black stuff" that comes off		3
Germs and contagious diseases come from Negroes		5
Dark skin is from suntan		4
"Negro" is being born that way; made that way by God	2	4
Negro hair is different		1
Negroes skin feels different		1
Negroes are not as pretty as whites		2
Negroes look nice (pretty) as whites	3	
<i>Social characteristics</i>		
Colored like to fight, beat up people		11
Colored kill white people		1
Colored rob white people	1	
White are afraid of colored		5
People make fun of colored		11
Colored cheat		1
Colored are richer		1
Colored are nice	3	
Colored don't fight	1	
Colored get killed by white	1	

This prevalence among white children of associations of dirt and suntan with Negro may result from the literal acceptance of adult metaphors. It is probably fairly common for parents to reprove dirtiness, or to comment on suntan, in terms of resemblance to Negroes. It appears easy for children to reverse the order of influence and derive the reason for being colored. Thus, if falling in a mud puddle makes you look "colored," then logically, being "colored" may be the result of falling in a mud puddle. With the exception of one Negro child who associates being Negro with being dirty, all of these responses come from white children.

For most of the children who ascribe dirtiness to Negro, dirty means "mud," "dirty face," and the like. A small number of children (5 per cent) give it the meaning of germs ("He'll get germs on the baseball bat") and contagious diseases.

Negro hair texture is mentioned by two white first graders:

"He (the colored boy) has short hair, and his hair sticks up like that."

"He's jumbo! You can always tell by his hair."

Social characteristics ascribed to the Negro are predominantly on a theme of aggression, sometimes with fear, sometimes with a kind of admiration:

"Negroes like to fight," "they are good fighters," "they kill white people." A kindergartner says: "He (Negro child) could fight better than the other. Sometimes they hurt other children and give them a black eye, or hit them in the stomach." And a first grader says: "He's a nigger and they're white and he might hurt a girl. That's what niggers do sometimes." Aggression is perceived both as coming from the Negro ("Whites are afraid of Negroes") and directed toward the Negro ("People make fun of colored").

It is interesting to compare the characteristics of aggression in the children's expressions with the adult stereotypes of the Negro, in which the Negro man carries a knife; in which Negro gangs are tough fighters; in which white girls are threatened by Negro rape; in which "colored section" is synonymous with "bad" or "dangerous to whites." The children's exposition of these stereotypes and attitudes varies from statements such as "No (he won't ask to play); he's colored and they're white. He don't know if they'll hurt him" to "There was a little colored boy who killed a white boy with a knife." Others invoke authority or outside experience in support of their statements:

Well, my mother said that sometimes colored people beat up white children. When we go in the trolley we see a colored section, and there is a white section. And that's why white people never go near the colored section.

There are too few statements from the Negro children on this topic to permit generalization. Those which occur most frequently are a denial—that is to say, a recognition—of the stereotypes given by the white children; thus, "Negroes look nice as white," "Negroes are nice," "Colored don't fight"; although one Negro child expresses his view of Negro-white rôles and rationalizes his preference for being colored thus: "Yes (he's glad he's colored). 'Cause when he grows up if he's white they'll rob him, 'cause he'll have so much."

#### E. VALENCES OF MEMBERSHIP IN NEGRO AND WHITE RACES

There can be little doubt, after examining the preceding data, that Negro and white races are valued unequally by both groups, and that social perceptions in which race has a part are frequently altered in the directions dictated by social prejudices against Negroes.

The extent to which Negro and white possess positive or negative valences for the children of both races, i.e., desirability or undesirability of belonging to each race, and the sources of these valences were probed by asking the

child to identify alternately with the Negro child and the white child of the picture in this series of questions:

Is the colored boy glad he is colored? Why? Would he sometimes like to be white? Why? Is the white boy glad he is white? Why? Would he sometimes like to be colored? Why?

Here the child is removed somewhat from the influences of the play situation and is directed more specifically toward giving his perception of Negro and white.

The quantitative results on valences are given in Figure 4, which presents the proportion of the sample of each race and age group who select each race in the various choice situations. There is an overwhelmingly positive valence for white group membership (Columns 5 and 6, Figure 4a); not only do white children like being white (88 per cent), but Negro children, too, rarely say that the white child does not like being white (10 per cent). The choice between remaining Negro or becoming white (Columns 3 and 4, Figure 4a) again favors white membership; most of the white children (73 per cent) do not expect the Negro child to prefer his own race. The white child's assumption that the Negro child does not want to remain Negro is, in fact, fairly accurate; 74 per cent of the Negro children say that the Negro boy wants to be white.

The 72 per cent of Negro subjects who say that the Negro boy is glad to be Negro stands in sharp contrast to the 31 per cent of white subjects who think so. But the 72 per cent of affirmative statements from the Negro children loses much of its convincing character when the responses to the set of four questions are considered together. The telling feature in Figure 4a is the almost identical proportion of affirmative answers by Negro children to both questions: "Is the Negro boy glad he is Negro?" and "Would the Negro boy like to be white?" This feature is indicative of the ambivalent feelings of the Negro children toward their own race, feelings which are documented in the reasons for their choices.

In the light of the overwhelming rejection of Negro by the white children, the 31 per cent of affirmative responses on the question, "Would the white child like to be Negro?" is somewhat surprising. Analysis of the reasons reveals that usually an affirmative to this question by a white child is based on situational considerations, particular circumstances in which being Negro would be an advantage, as: "Yes . . . sometimes when all colored are around"; or, "yes . . . 'cause in a fight they (Negroes) can fight better"; or "Yes . . . if his mother is colored."

## PERCEIVED DESIRABILITY OF BEING NEGRO OR WHITE

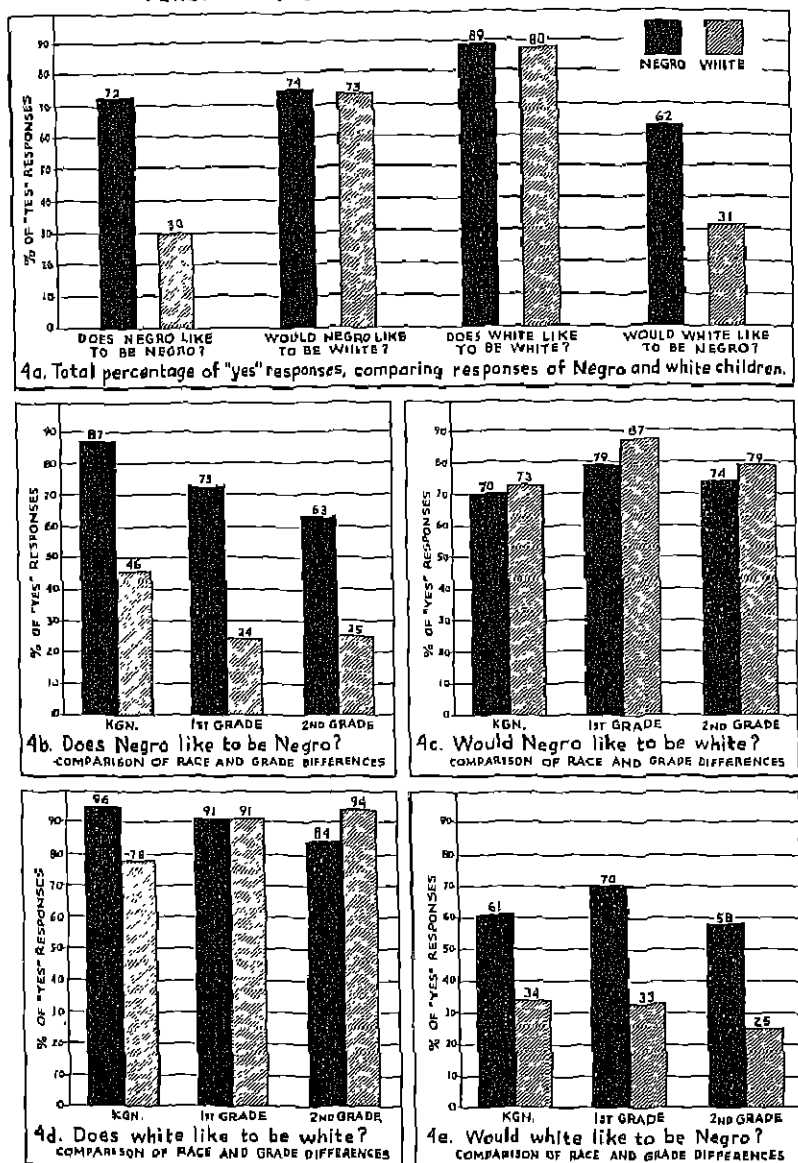


FIGURE 4

Age trends in the data on valences are unreliable. There is a tendency for an increase in preference for white and a decrease in preference for Negro. The qualitative changes with age are discussed in Section VIII.

#### F. INDIVIDUAL PATTERNS OF VALENCES OF NEGRO AND WHITE

The following data on valences have been analyzed according to the pattern of "yes" and "no" responses of each child. The frequencies of major patterns are presented in Table 10.

TABLE 10  
INDIVIDUAL PATTERNS OF RESPONSES TO VALENCE QUESTIONS ON NEGRO AND WHITE  
(Percentage of children)

	Kgn.	Negro children			Kgn.	White children		
		1st Grade	2nd Grade	Total		1st Grade	2nd Grade	Total
N Y Y N	4	6	13	9	22	46	48	40
Y N N Y	4	0	0	1	0	2	0	1
Y N Y N	13	12	13	13	2	3	6	4
N N Y N	9	0	0	2	5	6	4	5
Y Y Y N	13	6	14	11	14	8	10	11
Y Y Y Y	39	61	29	40	27	9	6	13
N Y Y Y	0	6	8	5	5	16	15	13
N Y N Y	0	3	5	3	2	5	2	5
Y N Y Y	4	0	5	3	0	0	2	1
Incomplete responses	13	6	13	13	22	5	6	7

The exclusive valuation of belonging to the white race (No, he doesn't want to be Negro; yes, he wants to be white; yes, the white boy wants to be white; no, the white boy doesn't want to be Negro) finds unambiguous corroboration in the responses of a large number of the white children (40 per cent). An illustration is taken from the record of a first grade boy:

"No (the Negro boy doesn't want to be Negro). White people don't like colored and colored don't like white people."

"Yes (the Negro boy wants to be white), but he can't. He would want to have a lot of kids with him."

"Yes (the white boys want to be white), because I don't want to be colored because I don't like colored people."

"No (the white boy doesn't want to be Negro), if he likes to be a colored boy, then the other boys would have a fight"

The same pattern appears in 9 per cent of the Negro subjects. It is illustrated in the response of a second grade Negro girl:

"No (the Negro boy doesn't want to be Negro). I don't."

"Yes (the Negro boy wants to be white), so he can play ball."

"Yes (the white girl wants to be white), so they can play ball"

"No (the white girl doesn't want to be Negro), because she can play."

The corresponding all-Negro value pattern (yes, no, no, yes, appears only twice: in a first grade white child who gives the following response:

- "Yes (the Negro boy wants to be Negro). He can't get dirty."
- "No (the Negro boy doesn't want to be white). He could get dirty."
- "No (the white boy doesn't want to be white). He could get dirty."
- "Yes (the white boy wants to be Negro). He wouldn't get dirty."

This, to say the least, is a backhanded way of expressing the value of being Negro; and in a Negro kindergarten child who responds:

- "Yes."
- "No. 'Cause."
- "Don't know."
- "Yes, colored are nice."

This may be an expression of exclusively Negro value, but it is surely not a strong statement of it.

The pattern of responses which might be assumed to indicate a compatible state of affairs in which each race prefers its own and grants this same preference to the other race (yes, no, yes, no) appears for 13 per cent of the Negro children and only 4 per cent of the white children. The accompanying reasons show, however, that the origins of these responses are in personal conflict and social antagonism. A Negro first grader's responses suggest conflict:

- "Yes (he's glad he's colored). 'Cause he don't want to be white."
- "No (he doesn't want to be white). 'Cause he don't want to."
- "Yes (she's glad she's white). 'Cause she wants to be white."
- "No (white does not want to be Negro). 'Cause she hates the colored."

Another Negro child expresses only fear and dislike of white aggression:

- "Yes (Negro likes to be Negro). Some white people, they will kill you."
- "No (Negro does not want to be white). I don't like white boys."
- "Yes (white likes to be white). He can hit hard."
- "No (white does not want to be Negro). Maybe colored people can't fight."

An affirmative answer to all four of the questions appears, at face value, to be meaningless. It is given by 40 per cent of the Negro children and 13 per cent of the white children. In most cases, however, the four "yes" responses appear to be linked with a variety of experiences or values which the child brings to his valuation of Negro and white, some of which influ-



ence him to reject, others to accept the racial membership. Thus, from a first grade white child:

"Yes (he's glad he's colored). He could fight better."

"Yes (he would want to be white). He could play baseball and all with the other kids."

"Yes (she's glad she's white). She could play baseball sometimes."

"Yes (she wants to be Negro). She would like to fight sometimes like colored boys and girls. I like them. They don't hurt you."

And a second grade white child shows a kind of relativistic attitude:

"Yes. I am glad I am white, and I guess he is glad he is colored."

"Yes (Negro wants to be white). I guess so. Some white kids might make fun of him."

"Yes (he's glad he's white). So the white kids won't make fun of him."

"Sometimes (white wants to be Negro). If colored boys bother him and he is in a colored neighborhood. Sometimes when I am in a colored neighborhood, I wish I was colored."

Many Negro children show conflict and attempts at rationalization; for instance, this second grade child says:

"Yes. He's glad (he's colored) because he don't want to play with the white children."

"Yes (he wants to be white). He wants to play with the white children."

"Yes (she's glad she's white). She don't want to play with colored."

"Yes (she wants to be Negro). Sometimes she wants to play."

#### G. EXPERIENCES AND VALUES FROM WHICH VALENCES OF NEGRO AND WHITE ARE DERIVED

Illustrations of responses to valence questions have indicated some of the considerations in choosing or rejecting membership in each race. The frequencies of the major considerations by Negro and white children have been analyzed. (Since the valence questions on the Non-Barrier Picture evoke essentially the same response as on the Barrier Picture—see Figure 3 in Section V—the Non-Barrier Picture data are not presented separately. The quotations and summaries of considerations have been taken from both pictures.)

The major determinant is the social disadvantage in being Negro, the anticipation of rejection in circumstances where acceptance is of great importance. It means not being liked by people, not being asked to play, not being allowed "in people's yards," et cetera. This appears in 40 to 50 per

cent of white children's responses and in about 20 per cent of Negro children's responses. That there is an inherent, unalterable "badness" or "inferiority" in being Negro is the perception of about 20 per cent and 10 per cent of the white and Negro children respectively. ("Colored are bad." "Not as pretty.")

The reasons for wanting to be white are mainly these reasons in reverse. White is a social advantage and carries with it the probability of being liked and having friends (40 per cent for both groups). White equals good or better (20 per cent of white children, 5 per cent of Negro children). White is sometimes seen as good because "I *am* white."

In the relatively few instances in which affirmative answers are supported by reasons, the "God-given" quality ("God made him colored") of one's race and family ties ("His mother is") are mentioned in a few cases.

Where white membership is rejected by white children, situational advantages (discussed earlier) account for most of the responses; whereas the Negro children, in most instances, do not explain their rejection of white.

These responses, as well as the interpretation of the play situations in the pictures, give extensive evidence that these children have learned well and accepted many of the cultural conflicts and values regarding Negro and white. Many children have expressed them to a high point of differentiation. In children in whom only the vague beginnings of awareness are apparent, these beginnings are not different in orientation from the attitudes of their more "sophisticated" peers.

#### H. REVERSAL OF BARRIER PICTURE AS A TEST OF CONCLUSIONS ON RACE ATTITUDES

The investigators were aware of the fact that the data on which these conclusions are based were obtained from picture stimuli which emphasized Negro minority status (one Negro child in a group of white children, the Negro child on the periphery of the play group). This factor might account for part of the apparent high degree of prejudice against Negro. To investigate this possibility, the Race Barrier Picture was reversed (one white child in a group of Negro children, the white child on the periphery). Nineteen white children from the first grade in School 5 were tested and their responses compared with the responses of first grade children in the original sample.

Are the social perceptions and valences the same or now changed? Is consciousness of race more or less strongly revealed?

Exclusion and rejection are not diminished by the change in picture struc-

ture. To "Will they ask him to play?" 63 per cent of the new sample and 67 per cent of the original sample say "no." More racial rejection appears in explaining why the boy is not playing. This is seen as rejection coming from whites and Negro children in equal proportion on the new picture (in the original it was more rejection by the white children of the Negro). Two types of rejection appear in the illustrations below:

"They (Negro) asked him (white) once and he said, 'No!'"

"They don't ask him no more. . . . They want to play with the white boy, but he don't want to play with them."

"They don't let him play. . . . They want him to be colored."

The structure of both pictures and the question asked [Will they (group) ask him?] unquestionably influence the response in the direction of making the group necessarily the decision-maker in the situation. Thus, on the two pictures the frequency of the group's determining and the peripheral child's determining the structure are indicated in Table G.

TABLE G

Original picture—	53% group determining, 23% individual
New picture —	52% group determining, 27% individual

However, when only the answers which give race as the reason for not playing are taken from the preceding percentages, the influence of number of children in the play group becomes less and the influence of race becomes more important. In the original picture, white *group* rejects in 48 per cent of the cases, Negro *child* rejects in 2 per cent. In the new picture, Negro *group* rejects in 26 per cent of the cases, white *child* rejects in 16 per cent. It is still the group of children which is the determiner, but to a much smaller degree when group is Negro.

In the valence questions the structure of the picture alters the responses in one respect: The desirability of being Negro increases. When the children playing are Negro it is an advantage to be Negro (7 children of the 19). Five children of the 19 reply that the white child would want to become Negro simply in order to play. Three also see the boy wanting to become Negro in order to play, but at the same time indicate that it is better to be white. One even goes so far as to interpret this as follows:

"Yes, sometimes (he might want to be colored), 'cause he wants to play."

But

"This may be his (white boy's) yard, and if it is he can chase these kids out."

Being white (white want to be white) is still perceived as more desirable than being Negro by 17 out of 19 children and the experiences and values are the same as those given on the original picture—Negro is bad, peculiar, to be feared:

"He likes white people more than he likes colored people. We have a little colored boy in our room (giggle, giggle)."

"He is afraid that they'll kill him. He is afraid they'll have a knife and he don't."

The projections from the reversed Barrier Picture confirm the conclusions of the study: that the children's responses to race reflect the adult culture patterns of rejection and hostility toward Negroes.

## VII. CHILDREN'S SOCIAL PERCEPTIONS OF CATHOLIC, PROTESTANT, AND JEWISH

### (Responses to Pictures on Religious Groups)

The group belonging of the child may be defined with religious boundaries perhaps as sharply, at least on occasion, as with racial membership. Surely religious identification may involve the whole person as centrally and as deeply as race.

The processes by which these kinds of self-identifications and attitudes develop have received relatively little scientific attention (in contrast to racial awareness) at the point of their beginnings in early childhood. There is little documentation of the meaning of religious differences to children, and there is little systematic analysis of the effects on children of religious majority or minority status.

Certain of the problems in the study of religious groups are identical with those regarding race:

(a). The culture in which the socialization of the child takes place is one in which religious as well as racial membership has social consequences. In our national culture today religious differences, however severe, do not generally involve social discriminations of the extent involved in racial discrimination. Within limits, dogmatic differences are accepted, and freedom of worship is conceded. Behind this formal or official ideology, superstitions about the "strange" beliefs and practices of other sects frequently persist and feelings toward other religious groups may range from religious rivalry to hatred. In some areas, differences between religious groups may also be accented and made socially significant by differences in education, custom, or national background. How are these cultural mores and values communicated to the child?

(b). The child's own "social ground" becomes defined in religious, as well as racial, terms; and, sooner or later, it becomes defined in contrast to others different from himself. Group belonging is as much a part of the social ground of the child who belongs to no religion as it is for the child with religious membership. For him, the differentiations in religion exist and his position is one of being different, of not belonging, with connotations of good or bad. Experiences which are pleasant and which are unpleasant, feelings of security and insecurity become linked with these group factors. How do these factors affect the young child's understanding and feelings?

Further comparisons in the study of racial and religious group attitudes involve differences in the two areas: (a) In examining responses about

Negro and white, it was possible to separate the perception of a physical racial difference from a social perception. Since religious groups are not formed on the basis of physical differences, are religious differentiations more difficult to learn, are they learned later than race? (*b*) Since religious differences are based on philosophical differences, are they less real to the child, of less interest because less comprehensible to him, more vague and removed from persons than are Negro and white differences? Are religious groups perceived in religious, philosophical terms?

The data from the four kinds of religious pictures have been analyzed with attention to the preceding questions. The cognitive structure—the extent to which the social world is differentiated with respect to Catholic, Protestant, and Jewish and the bases on which the differentiations are made—has been analyzed first. This might be seen as parallel to the data on the children's ability to differentiate Negro from white and with what conceptual content. Secondly, the data on awareness of religious tension and the expression of religious prejudice have been analyzed.

#### A. CHILDREN'S COGNITIVE STRUCTURE OF RELIGIOUS GROUPS

From three sources in the children's responses, data are obtained on the meanings of religious group identifications: (*a*) from the children's recognition of symbols in the Church and Synagogue Pictures, (*b*) from their ability to define the groups in answer to direct questions (What does —— mean?), and (*c*) from their interpretations of the pictures.

The number of children from the total sample who identify religious groups before the tester specifies a group in the Church and Synagogue Pictures is small. These numbers are presented in Table *H*.

TABLE *H*

	Catholic	Protestant	Jewish
Initial interpretations mention—			
On Synagogue picture	6	0	19
On Church picture	9	0	18

Protestant never appears in response to the stimuli indicated (nor is any Protestant denomination named at this point). The children who mention Jewish and Catholic do not represent a random group from the sample. Most of them come from School 5, in a neighborhood in which there are many Catholics and Jews. Ten of the 19 children who identify Jewish on the Synagogue Picture are from this school, seven of them Jewish; the other nine are Jewish children from other schools. Of the six children mentioning

*Catholic in initial responses to the Synagogue Picture, five are from School 5. Catholic is introduced as a contrast group to Jewish. The same is true of the occurrence of Catholic and Jewish on the Church Picture. (The child's own religious group membership in relation to his responses is discussed in detail in Section VIII.) Children who make the identifications on their first response bring to the picture much more than mere recognition of the group. The symbols call up experiences and associations filled with emotional meaning, illustrated in the second grader who responds to the Synagogue Picture:*

*"You said this was a game, but it is getting serious."*

*"It just came into my mind that these (the boys on the corner across from the synnagogue) are Italian or Catholic boys and they are waiting to bent them up."*

When group identifications are made by the tester, there are many more indications of familiarity. Identification of one group frequently evokes a response which involves another religious group. Thus, on the Mass Picture, after the child has been told that "These are Catholic children coming from Mass," he may go on in his interpretation by bringing in Protestant, Jewish, Negro, and white. To these children, Catholic and Protestant and (or) Jewish are seen as related or parallel religious differentiations. The frequency of this kind of differentiation is presented in Table 11. Protestant appears as a contrast to Jewish and to Catholic, but it is given primarily by Protestant children. Jewish and Catholic are more frequently the contrasted groups.

Twenty-one per cent of the children in the course of the session identify their own religious group membership, by saying either "I'm Catholic" or "I'm not Jewish (Protestant, Catholic)." Several children feel compelled to make this identification on five out of six religious pictures.

TABLE 11  
GROUPS NAMED BY CHILDREN IN CONTRAST TO IDENTIFIED GROUPS  
(Percentage of children)

Group identified by tester: Group named in contrast::	Jewish on Synagogue		Catholic on Mass		
	Protestant	Catholic	Protestant	Jewish	Race
White children					
Catholic	7	19	3	7	0
Protestant	15	18	22	2	2
Jewish	6	21	0	44	12
Negro children					
Protestant	0	1	0	0	12

The children's familiarity with each group was rated, taking into account the preceding data and responses to the definition questions. Ratings were made on the first picture in which the specified groups appear (Table 12).

TABLE 12  
KNOWLEDGE ABOUT RELIGIOUS GROUPS\*  
(Percentage of children)

Amount of knowledge re Group membership of children	Catholic				Protestant				Jewish				Christian			
	Np	P	C	J	Np	P	C	J	Np	P	C	J	Np	P	C	J
None	53	14	17	26	87	43	57	82	59	28	28	6	72	65	51	39
Vague	36	38	31	56	13	32	27	18	35	35	40	23	18	24	41	58
Specific	10	30	34	15	0	15	12	0	4	35	29	50	9	11	6	3
Extensive	1	18	17	3	0	10	4	0	2	2	3	21	1	0	2	0

\*Data on Catholic and Protestant from Mass Picture; data on Jewish and Christian from Synagogue Picture. The categories are defined as follows: *None*—Child shows no indication anywhere in interview of recognition of label; *Vague*—There is a definite association but one which the child does not or cannot elaborate—thus Catholic is "school" or "people"; *Specific*—Child has not only a definite association but in addition gives some elaboration or makes a specific application—thus "Catholic school is where Sisters teach" or "my cousin is Catholic"; *Extensive*—Several specific ideas are given or a single theme is elaborated at length.

The children have been separated according to their own group membership. Catholic is the most widely known religious group, with Jewish a close second. The Jewish children have much more knowledge about Jewish than the Christian children. Christian and Protestant are terms unfamiliar to most children, and they receive the fewest "extensive" ratings. Jewish children are, in a sense, as familiar with "Christian" as Christian children, though its meaning for them is limited mainly to "not Jewish." Facts about Protestant are given about equally by Protestant and Catholic white children.

The greatest deviation among the subgroups in the sample appears in the Negro group, in which there is an almost complete absence of specific facts about religious groups. It is one kind of evidence (of which more is presented later) that for the Negro children the most potent group factors are racial and that the differentiations and tensions along religious lines are dwarfed or obscured by comparison.

The kinds of ideas associated with Catholic, Protestant, Jewish, and Christian are summarized in Tables 13, 14, 15, 16. The large number of categories in each table demonstrates the variations in meaning of each group.

Catholic is strongly associated with "Catholic school," and many of the elaborations of "Catholic" concern what goes on in Catholic school. It



TABLE 13  
RESPONSES TO THE QUESTION: WHAT IS CATHOLIC?  
(Percentage of children)

	Barrier Picture	Church Picture	Mass Picture
Church; religion	29	39	18
Learn about God; God's children	1	2	4
Different from Protestant	1	3	0
Like Protestant and Jewish	0	4	1
Sisters; black and white gown	4	2	1
Cross; cross locket	1	1	1
Catholic school	38	24	35
Catholic people; children	4	4	6
Person identified as Catholic	1	1	1
Italians	2	2	0
Americans	0	1	0
Colored and/or white	2	2	0
Good; nice	0	1	1
Come late to school	0	0	5
Catholic and Protestant don't play together	1	1	0
Don't know	27	26	38

TABLE 14  
RESPONSES TO THE QUESTION: WHAT IS PROTESTANT?  
(Percentage of children)

	Barrier Picture	Church Picture	Mass Picture
Church	31	37	7
Don't learn about God, Jesus	0	1	1
Learn about God; God made them	1	2	0
Christian	1	1	1
Different from Catholic	6	4	1
Like Jewish and Catholic	1	1	0
Prayers, singing, preacher, cross on church	2	1	0
Protestant school	15	8	20
People; family	1	3	4
Person identified as Protestant	0	1	1
Not Jewish	1	1	0
American	1	1	1
Italian	1	2	0
Colored and/or white	4	2	2
Different names; talk different	1	0	0
Good; smart	2	1	1
Get punished; something for being bad	1	0	2
Catholic and Protestant don't play together	2	0	0
Don't know	35	41	65

is described variously by children in different neighborhoods. Statements that children in Catholic school work harder, stay longer hours, are taught by Sisters, have more severe discipline, and learn more give incontrovertible evidence of children's day-to-day discussions.

TABLE 15  
RESPONSES TO THE QUESTION: WHAT IS JEWISH?  
(Percentage of children)

	Jewish Barrier Picture	Synagogue Picture	Jewish Holiday Picture
Church; religion	3	11	4
Sinner; don't believe in God	0	2	0
Put God on cross	1	0	1
Different from Protestant and Catholic	1	1	3
School	4	8	6
Holidays and customs mentioned	6	1	13
Have stores	0	1	2
Jewish people	6	12	16
Person identified as Jewish	8	6	3
Hebrew	0	0	0.7
American	0	0.65	0
White	5.5	0	7.6
Colored and/or white	0	4	1
In Europe, in Germany, Polish, Italian, English	1	5	2
Talk different	14	9	3
Different names	0	1	1
Look different	0	1	0
Good; kind	1	0	1
Bad; dumb	1	1	2
Don't play with Catholic and Protestant	1.4	.65	0
Don't know	50	49	48

TABLE 16  
RESPONSES TO THE QUESTION: WHAT IS CHRISTIAN?  
(Percentage of children)

	Jewish Barrier Picture	Synagogue Picture	Jewish Holiday Picture
Church; religion	8	10	10
God's children; love Jesus; believe in Christ; go to heaven	3	1	3
Christened	0	7	6
Protestant	0	3	2
Catholic	0	1	2
Talk different; talk English	4	1	1
Gentile Italian	3	0	1
American	4	1	0
Christian people	4	5	1
Person identified as Christian	0	0	4
Not Catholic	1	0	0
Not Jewish	1	1	0
Like Jewish or Italian	1	1	0
Goy	1	0	0
English	0	1	0
White and/or colored	4	2	4
Good; proud	6	3	4
School	4	5	8
Don't know	54	66	61

"A Catholic is you are white and you do arithmetic and you do homework. I know all about Catholic. You see when you have chewing gum, they put it on your nose. Kids tell me. In this school when you have chewing gum, we put it in the wastebasket."

"Catholic people go to school. Some of the people on my street are Catholic. They know how to write and make houses and we don't. All we can make is little pussy cats and pumpkins."

"When you're Catholic you go to St. Anne's School and have to go to church every morning. When they're bad they have to stay in school till six."

Many of the responses refer to "Catholic" as "church" or in terms of religious belief or custom. They likewise show the influence of personal experience. It may be the experience of the onlooker:

"Catholic is when you have to go to church and tell your sins and all. I do go to St. Anne's with a girl on my street. She's Catholic."

Or it may be the experience of a Catholic child for whom it is the religion she has been taught: "A Catholic knows all about and gives God his heart."

The children who have some perception of "Protestant" associate it mainly with the institutions of church and school, although school is far less frequently associated with Protestant than with Catholic. Often, Protestant is negatively defined as "not Catholic." Public school, which is the "opposite" of Catholic school, is seen as "Protestant school"; and to Protestant are ascribed particular aspects of public school which contrast with Catholic parochial school. A second grader says, "First thing (about Catholic is) they write in first grade. Protestants print in first grade." Protestant religion is occasionally defined as different from Catholic in specific respects, such as: "Catholics know most about God. . . . Protestants don't know much about God and don't know about Jesus." This kind of response appears with the advantage given to Protestants and Catholics with about equal frequency. There are a few responses which define Protestant in religious terms not with reference to Catholic. These seem to grow out of the child's experience, thus:

"Protestant is . . . you go to Sunday School and when you get done eating and drinking you go to Sunday School."

"I used to go to Sunday School. You have to sit down on chairs and you have to sing."

Catholic and Protestant, as labels attached to people, occur relatively infrequently and usually without expressions of approval or disapproval.

Definitions of Jewish, on the other hand, differ sharply from those of

Catholic or Protestant. Jewish is attached to people and to people with certain characteristics—people who are somehow foreign (“Jewish is in with Polish”), or who speak a different language, or who are not “American.” Only on the Synagogue Picture is religion mentioned with any frequency and except for responses to the Jewish Holiday Picture, there are few references to or descriptions of Jewish customs.

Descriptions of Jewish in many children reflect their personal experience. This seems to be the case in describing language differences between Jews and non-Jews: “Italian don’t talk like Jewish. Italian people when they’re old don’t understand Jewish people when they’re old”; and again, the case where Jewish children refer to personal experience in the synagogue, “Sometimes the shules give them parties,” or in Hebrew school, “I go to Hebrew, too; I go on Wednesday, after school.”

Negro children who define Jewish as “white people,” or as “Jewish holidays means stores is closed and you can’t get nothing; people is mean and don’t want to open on some days,” even more obviously reflect the conditions of their neighborhood where many of the storekeepers are white and Jewish.

A few Christian children show more or less distortion of formal religious teaching. Thus, one child says “Jewish” means “sinner,” and another says:

“Jewish is like Jewish people, like up in heaven they made a plan to kill God and God died for us, and I forget this guy’s name, he wanted to give God a wife and money. Soldiers put God in a cave and God said, ‘I’m the Lord’ and they didn’t believe him and spit on his face.”

The term “Christian” is usually described in a religious context, though relatively few children recognize it at all. Sometimes it means being christened: “They put water on your head when you’re a baby and pray for you.” Others speak in terms of belief or virtue: “Christians know all about God; they’re on their way to heaven,” and “Christians is God’s children.” A few children see Christian as Protestant or Catholic and a few (Jewish children) identify it with “not Jewish,” “Gentile Italian,” or “goy.” A summary of the areas in which the religious groups are described (not limited to data from the definition questions) is given in Table 17.

Several major points emerge from the analysis of children’s cognitive structure of religious groups: Roughly three-quarters of the white children recognized and gave some definite meaning to one or more of the religious groups. In general, they are able to give more information about their own group than about other groups, but this difference is not great. Aware-

TABLE 17  
DESCRIPTION OF RELIGIOUS GROUPS\*  
(Percentage of children)

	Personal characteristics and social interaction	Description					
		Religious customs	School	Language differences	National racial factors	Identification of persons	Ideas of group origin
Catholic	11	31	43	0	6	7	1
Protestant	1	37	10	1	5	4	1
Jewish	58	35	0	10	5	5	1

\*Data on Catholic is taken from Mass Picture; on Protestant from Church Picture; on Jewish from Synagogue Picture.

ness of religious groups is much lower among the Negro children than the white children. The meanings of groups given by the children do not always indicate well-developed concepts or clear recognition of groups. Indeed, in most cases, their facts, though correct in themselves, give an incomplete and, if generalized, wholly erroneous picture of the group (for example, "Catholics wear black gowns," or "Jewish is Hebrew school"). The worlds of these children are not structured into three dominant religious groups of Catholic, Protestant, Jewish (though a few children do exactly this).

The effects of religious identifications on the perceptions of social interactions and the affects and values attached to these identifications are analyzed in the following sections.

### B. INTERPRETATIONS OF INTERACTIONS ON RELIGIOUS PICTURES

The effects of identification upon the perception of interactions in the pictures are varied. For many children, religious membership seems to have no relevance to social interactions and in their story themes on the pictures it is ignored. When religious identification appears in the interactions it is used mainly in the projection of group hostility. This varies from themes with personal involvement in the hostility to the recounting of group prejudices heard or seen and the expression of values relative to being a member of one group or another. A few children describe religious groups in friendly interaction.

#### 1. Religious Symbol and Observance Pictures

Interpretations of interaction on the Symbol and Observance Pictures, after the identification by the tester, have been analyzed by considering (a) responses to two questions on interaction ("What are they going to do?" and

"Are they friends?"—Table 18); (b) expressions of feelings which occur anywhere in the responses on the picture (Table 19); and (c) projections of group tension which go beyond picture content in their implications (Table 20).

TABLE 18  
RESPONSES TO RELIGIOUS SYMBOL PICTURE  
(Percentage of children)

	Kdgn.	1st Grade	2nd Grade	Total
<b>Synagogue Picture</b>				
<i>What are they going to do?</i>				
Friendly	19	10	20	16
(Friendly in group terms)	( 3)	( 0)	( 2)	( 2)
Hostile	14	30	44	31
(Hostile in group terms)	( 6)	(12)	(26)	(14)
<i>Are they friends?</i>				
Yes	30	23	41	31
(Yes and in group terms)	( 3)	( 2)	( 2)	( 2)
No	29	37	40	36
(No and in group terms)	(13)	(16)	(18)	(15)
<b>Church Picture (Catholic and Protestant)</b>				
<i>What are they going to do?</i>				
Friendly	20	17	21	19
(Friendly in group terms)	( 5)	( 0)	( 0)	( 1)
Hostile	20	25	40	29
(Hostile in group terms)	( 7)	( 9)	( 6)	( 7)
<i>Are they friends?</i>				
Yes	63	44	50	51
(Yes in group terms)	( 2)	( 0)	( 0)	( 1)
No	23	35	39	33
(No in group terms)	( 5)	( 6)	(11)	( 7)

a. The responses of about half of the children to "What are they going to do?" are unmistakably friendly or hostile themes of interactions between the two groups of children in the pictures, with hostile themes outnumbering friendly themes in the proportion of about 2 to 1. Among these responses, a much smaller proportion express their friendliness or hostility in explicit group terms. Projection of hostility between Jews and non-Jews on the Synagogue Picture (14 per cent) occurs more frequently than projection of group hostility between Catholic and Protestant on the Church Picture (7 per cent). (Occasionally Catholic-Jewish hostility is brought into the Church Picture.)

The following excerpts will serve to indicate the nature of the themes of rejection and the kinds of group relations perceived by these children.

*Tell Me About This Picture? (Synagogue)*

"They (two children) are coming out of synagogue, and they (four children) Catholic."

*What Are They Going to Do?*

(Jewish child, second grade) "They (Jewish children) are going to walk by. Not even going to say hello—cause they're Catholic."

"They (Catholic) laugh at them (Jewish) because they go to synagogue."

*What Are They Going to Do? (Church)*

(Protestant child, first grade) "Nobody will play with them if they're not Protestant."

In the following there is the hint of the majority child's seeing the Jewish child as trying to get acceptance but being turned down:

*What Are They Going to Do? (Synagogue)*

(Protestant child, second grade) "I think they are going to fight. I think the Jews want to make up. But not them (non-Jewish boys). They're (Jews) going to try to be friends."

Neighborhood experiences are reflected in some of the responses:

"We don't like Jews on our street. Sometimes we fight Jews."

"Some Italians used to jump Jewish kids. Last time they got mixed up."

To the question "Are they friends?" the children respond in very much the same manner as on the preceding question; the amount of hostility in terms of saying the children are not friends is consistent with the percentage showing aggression in explaining what is going on in the picture. Again there is somewhat greater rejection in the Jewish-non-Jewish interaction (36 per cent say "no," of which 15 per cent are in group terms) than in the Protestant-Catholic interaction (33 per cent say "no," of which 7 per cent are in group terms). Various considerations appear in the reasons with which they support their reactions to the proposal of friendship: Some children who think of Jewish as foreigners or "people who talk different" easily find in this difference a reason for discrimination or a barrier to friendship.

"They don't want to play with him cause they don't understand him when he talks."

Similarly,

"No (they are not friends), 'cause they're Polish."

It must be emphasized, however, that although these perceptions (general neighborhood hostility or the "foreignness" of Jews) may predispose

toward perception of tension, they do not in themselves determine the nature of the interactions projected. Thus, 2 per cent of the children say that Jews and non-Jews, though different in some respects, are friends. One child says: "Yes (they are friends). It doesn't make any difference about the language."

Awareness of prejudice in the neighborhood does not always prevent the expression of friendship. The child who says, "Some Italians used to jump Jewish kids," says later, "Yes (the Jewish and Italian boys are friends). I am friends with lots of Jews on my street." "Christians don't like Jews. . . . Sometimes they play and forget all about if they're Jewish or not Jewish."

b. On the basis of the child's entire response on each picture, his feelings toward each religious group were rated. The distribution of ratings of feelings is given in Table 19.

There are striking differences here both in amount of feeling shown and

TABLE 19  
FEELINGS EXPRESSED TOWARD RELIGIOUS GROUPS\*  
(Percentage of children)

	Catholic	Protestant	Jewish	Christian
Rejection	9	1	27	3
Acceptance	14	4	10	9
Neutral	41	27	28	32
Can't Classify (no indication of group meaning)	36	68	35	56

\*Catholic and Protestant ratings from Mass Picture; Jewish and Christian from Synagogue Picture.

in the direction of the feeling. Whereas 37 per cent of the children express a definite attitude (positive or negative) toward Jewish, and 23 per cent a definite attitude toward Catholic, only 5 per cent show any feeling toward Protestant; and while both Catholic and Protestant evoke more expression of acceptance than of rejection, the reverse is true of Jewish.

c. While many children express feelings toward religious groups, and allow group to enter into the social situation of the picture, a smaller number of children indicate a consciousness of religious group tensions by going beyond the content of the pictures and by describing conflict between groups of people in society. The distinction between expression of feelings and expression of cultural conflict may be clarified by contrasting the two types of responses. In the first the child may say in effect that the children in the picture are not going to play together because some of them are Catholic and the others are Jewish, and that he doesn't like Catholics. In



TABLE 20  
PROJECTIONS OF GROUP TENSION\*  
(Percentage of children)

<i>Synagogue Picture:</i>		<i>Church Picture:</i>	
Non-Jews reject Jews	16	Catholic reject Protestant	2
Jews reject others	2	Protestant reject Catholic	1
Mutual rejection	6	Mutual rejection	2
Total	24	Total	5

\*Ratings based on child's complete responses to picture. These percentages include only those children whose projections are tensions between specifically mentioned groups of people—*beyond* the children in the picture.

the second, the child may give a similar answer but explain further that on his street Catholics fight Jews, and they are like enemies.

The percentages of children who show this consciousness of cultural pattern are presented in Table 20. Jewish and non-Jewish conflict is described in this way by about one quarter of the subjects, while Protestant-Catholic tension appears in only 5 per cent of the cases. Two examples of responses clarified in this way are given below:

(*Jewish child, second grade*) "I am glad I am Jewish. . . . I guess a lot of kids make fun of them (Jewish) and don't let them in their clubs, and they (Jews) don't let them in their clubs either."

(*Protestant child, second grade*) "Sometimes other people's mothers don't like Protestant to play with Catholic."

The responses with awareness of cultural patterns differ with regard to who is seen as maintaining the prejudice. This breakdown is given in Table 20. Protestants and Catholics are seen about equally rejecting each other; on the other hand, it is mainly non-Jews who are seen as maintaining the prejudice against Jews rather than Jews against non-Jews. In the descriptions of the tensions it is not always clear where the child himself stands in terms of accepting the pattern he has described. Sometimes he expresses feelings counter to the prevailing social values and behavior of which he is keenly aware.

## 2. Religious Barrier and Non-Barrier Pictures

The Religious Barrier and Non-Barrier Pictures are already familiar to the children in the setting of Negro-white interaction. Therefore, when the religious identifications are introduced, the pictures are much less ambiguous than on their first presentation. Thirty per cent of the children say that the foreground boy in the Barrier Pictures is excluded from play

even before the tester has introduced a religious group factor. (Most of these children say that the excluded boy is Negro.) Since only 40 per cent give this interpretation of exclusion after religious identification is made, the projection of this type of interaction cannot be accepted, on its face value at least, as having specific bearing on religious differences. On the other hand, one may compare the relative susceptibility of each of the religious groups to interpretations involving exclusion.

Exclusion of the labeled child occurs with the frequency given in Table I.

TABLE I

On Barrier Pictures of:	Catholic	Protestant	Jewish
Labeled child is excluded from play by	43%	49%	54% of the cases
Group membership is given as a reason for exclusion by	15%	21%	28% of the cases

Discrimination is most easily projected against the Jewish child. Although the percentages do not differ markedly, the quality of the rejections is quite different for the different groups. In contrast to projection of hostility against Jewish, when it is projected against the Protestant child, it is frequently of a perfunctory nature—unelaborated, and seemingly a concession to the established structure of the picture. This is not surprising when it is remembered that few of the children show more than dim understanding of "Protestant."

There are a few cases where hostility is seen as a necessary consequence of Protestant or Catholic affiliation.

"Nobody will play with them if they're not Protestant."

"There are a lot more Protestant than Catholic boys and the Protestant boys won't let the Catholics play."

The use of religious group as a reason for exclusion rises with age on each of the pictures: On the Catholic Barrier there is an increase from 11 per cent in the kindergarten to 24 per cent in the second grade; on the Protestant Barrier from 5 per cent to 37 per cent; and on the Jewish Barrier from 16 per cent to 36 per cent.

The results on the Barrier Picture are consistent with the responses to the Symbol and Observance Pictures in indicating the extent and quality of the effects of religious identifications on social perceptions and attitudes. Religion is a recognized differentiation without relevance to play situations for some children for some groups. For others, it is a factor which draws the line of exclusion just as sharply as it is drawn by race, as demonstrated

by a minority of the responses to the Religious Non-Barrier Picture. So rigidly do they adhere to aggression against a group that they deny the structure of the Non-Barrier Picture and create from it a theme of exclusion. This occurs in 7 per cent of the cases on the Catholic Non-Barrier; in 1 per cent on the Protestant Non-Barrier; and in 7 per cent on the Jewish Non-Barrier. It is illustrated in the following test records.

*Jewish boy, kindergarten*

WHAT ARE THESE CHILDREN GOING TO DO? (Religious Non-Barrier Picture.)

"Just throw snowballs. All these Gentile children are bad; this Jewish boy is good. All these children (Gentile) put snow on the pavement. This Jewish boy cleans off all the pavements."

ARE THEY FRIENDS? WHY?

"All these (Gentile) are friends, but not his (Jewish) friends."

### C. VALENCES OF MEMBERSHIP IN RELIGIOUS GROUPS

The effects of religious group membership on the interpretations of the pictures reveal, to a certain extent, the valence of each group for the child. The desirability of belonging to or not belonging to a group, however, may be derived from many other experiences and from values in other areas of his life than those relating to social interactions between children on the playground, in the school, or on the street.

The valences regarding religious groups may be expected to derive from many of the same sources as valences of racial group membership—from extension of self-identification (i.e., I am Protestant; I am good; therefore, Protestant is good); from formal indoctrination; from the values experienced in the family; from direct contact with members or customs of the group; from hearing expressions of attitudes toward the group.

Usually several of these factors work simultaneously to reinforce each other although sometimes, conspicuously in the case of the minority child, they may pull in different directions and produce more or less severe conflict.

In asking the child to tell to which group the boy in the picture would choose to belong, and why, the subject is at once indicating the relative desirability of the alternative groups and (more or less freed from the data in the picture) the nature of his considerations in making the choice.

Table 21 shows the distribution of responses to questions on the desirability of group membership in each of the religious groups. In general, the ratios of yes to no responses are high whether one considers members of the group in question or non-members. That is, there is a general recep-

tivity to membership in either of the pair of groups in the choice situation. This is the case particularly in the choice between Catholic and Protestant. It does not hold equally for the Jewish-Christian alternatives.

In contrast to the ratios from the same questions on Negro and white membership there is relatively high acceptance of all the religious groups by non-members. This is demonstrated by comparing the reactions of non-members of each of the groups pictured as the minority in the Barrier Picture (Table J).

TABLE J

Response of:	To:	Yes	No
White children	Would white child like to be colored	31%	61%
Non-Jewish children	Would Christian child like to be Jewish	42%	46%
Non-Protestant children	Would Protestant child like to be Catholic	44%	28%
Non-Catholic children	Would Catholic child like to be Protestant	55%	27%

The desirability of membership in the three religious groups may be compared by considering the ratio of yes to no on each of the four questions of belonging: For the children who themselves are members of the group, the desirability of belonging always outweighs the negative responses (Column 1 of Table 21). (The exception on the Jewish Barrier Picture is discussed later.) Non-members of the groups respond in a similar fashion (Column 5) by saying that the child who belongs to the particular group probably likes to belong (*i.e.*, children who are not Catholic nevertheless see the Catholic child as wanting to be Catholic). There are exceptions on the Barrier Pictures. Compared with the other pictures, the Barrier Pictures have the effect generally of making it less desirable to belong to the excluded group.

The idea of changing to another group (Columns 2, 4, 6 and 8) is accepted with certain considerations (discussed below) by the majority of children when the question of change is between Catholic and Protestant. The change between Jewish and Christian is more frequently rejected, when the suggested change is from own group [Jewish children's reactions to becoming Christian, and Christian children's reactions to becoming Jewish (Columns 2 and 8)].

In these valences are reflected an awareness of religious prejudice. Each group (Christian and Jewish) sees its own as desirable (there are excep-

TABLE 21  
RESPONSES TO "LIKE-TO-BE" QUESTIONS ON RELIGIOUS PICTURES  
(Percentages of children)\*

		Group members				Non-members			
		C to be C	C to be P	P to be P	P to be C	C to be C	C to be P	P to be P	P to be C
Catholic Mass (no meaning and omits 13, 30)	Yes	73	51	—	61	56	43	—	45
	No	14	36	—	26	14	27	—	25
Catholic Church (no meaning and omits 11, 14)	Yes	67	59	59	67	73	59	68	64
	No	22	30	30	22	13	27	18	22
Catholic Barrier (no meaning and omits 6, 18)	Yes	59	65	88	65	61	73	66	55
	No	35	29	6	29	21	9	16	27
Catholic Non-Barrier (no meaning and omits 12, 23)	Yes	65	47	—	59	64	61	—	57
	No	23	41	—	29	13	16	—	30
		P to be P	P to be C	C to be C	C to be P	P to be P	P to be C	C to be C	C to be P
Protestant Church (no meaning and omits 16, 22)	Yes	77	64	64	60	55	50	60	53
	No	7	20	20	24	23	28	18	25
Protestant Barrier (no meaning and omits 12, 28)	Yes	67	71	79	71	24	64	68	44
	No	21	17	9	17	48	8	4	28
Protestant-Non-Barrier (no meaning and omits 13, 28)	Yes	74	68	—	74	56	68	—	56
	No	13	19	—	13	16	4	—	16
		J to be J	J to be Ch	Ch to be Ch	Ch to be J	J to be J	J to be Ch	Ch to be Ch	Ch to be J
Jewish Holiday (no meaning and omits 5, 37)	Yes	68	37	53	74	46	46	56	30
	No	27	58	42	21	17	17	7	33
Jewish Synagogue (no meaning and omits 6, 34)	Yes	88	35	53	71	41	45	55	34
	No	6	59	41	23	23	21	11	32
Jewish Barrier (no meaning and omits 33, 12)	Yes	34	44	44	34	37	73	64	42
	No	33	23	23	33	51	15	24	46
Jewish Non-Barrier (no meaning and omits 25, 17)	Yes	63	25	—	38	49	52	—	44
	No	12	50	—	37	34	31	—	39

\*The children are divided into those who belong to the group for which the picture is named, and all who are not members of that group. The column headings abbreviate the questions, "Is the Catholic child glad he is Catholic?", "Would he sometimes like to be Protestant?" etc. The percentages of Yes and No are the responses of children who have indicated somewhere on the picture an understanding of the group identifications. The percentages of "no meaning" plus "omits" are those children (group members and non-members respectively) who give no indication of understanding or who fail to answer the question.

tions among Jewish children), but finds the idea of being part of the other group distasteful.

1. *Experiences and Values from Which Valences of Catholic and Protestant Are Derived*

The experiences and values which the children bring to the choice situations appear in the analysis of answers to the "Why" questions. In support of their choice of Catholic general reasons such as "he likes Catholic" or "Protestant is good" appear for about 15 per cent of the children. About 20 per cent give no reasons at all. When specific considerations enter into the choice they stem from contact with Catholic parochial schools (about 20 per cent) and Catholic churches or religious instructions (about 15 per cent), from experience of Catholic-non-Catholic social antagonism (about 8 per cent, prominently in School 5), and from identification with Catholic or another group (5 per cent).

Experiences and values relating to school and religion are sometimes reasons for acceptance and sometimes for rejection of Catholic membership. School linked with discipline is negative: "No (the Catholic boy does not want to be Catholic). In Catholic when you are bad they hit you with a ruler stick." When it is linked with the instruction or customs in the school it is sometimes positive, sometimes negative.

"Yes (the Catholic boy is glad to be Catholic), 'cause Catholic school is better."

"Yes (the Catholic boy would like to be Protestant), because he don't like to say his prayers in the Catholic school."

Values linked with religion are likewise both positive and negative:

WOULD PROTESTANT CHILD LIKE TO BE CATHOLIC?

"Yes. If he knew about God he'd like to be Catholic."

IS CATHOLIC CHILD GLAD HE IS CATHOLIC?

"No. Because they have to go to church and they don't want to go to church."

WOULD PROTESTANT CHILD LIKE TO BE CATHOLIC?

"Yes. Catholic have more better churches because the Catholics bring more money, they go in the morning, afternoon, and after school and all."

The prevalent idea that "Catholics learn about God" is always accompanied by the spoken or unspoken assumption that this is a virtue in them, and by the implication that other religions which "don't learn about God" are consequently not as good. Thus:

"If he goes to Protestant he'll have a black sin on his soul."  
 "Maybe he goes to hell."

The expression of social antagonisms primarily between Catholic and Protestant occurs in the play situation of the *Barrier Picture*; more frequently it is seen as Catholic-Jewish antagonism. "No (the Catholic boy is not glad he is Catholic), 'cause maybe there's lot of Jewish kids around and they won't let him play."

Valences of Protestant groups are already apparent so far as they are revealed in the statements of comparison with Catholic. Relatively few children express strong feelings either of acceptance or of rejection. About a quarter of the reasons are nondescript: "They like Protestant"; "He likes it because his mother and family are Protestant."

Comparison with Catholic is frequent (about 20 per cent) in relation to school, religion and social rôle, with the advantages and disadvantages to each about equally divided:

"It's just as good as Protestant."  
 "I'm glad I'm not Catholic, 'cause they're bad."  
 "Because in Protestant school you don't have Sisters; I like teachers better."

Sunday School and church experiences are usually recounted with favorable reactions (about 10 per cent).

## 2. *Experiences and Values from Which Valences of Jewish and Christian Are Derived*

Unlike the responses to Catholic and Protestant, the responses on Jewish and Christian show a marked difference between the responses of group members and non-members. Jewish children place much higher value on being Jewish than do Christian children (Columns 1 and 4); and members of each group tend to reject the idea of accepting membership in the other group (Columns 2, 4, 6, 8).

The divergence between Jewish and Christian children appears again in the individuals whose pattern of response expresses extremes of rejection or of exclusive valuation. The complete rejection of Jewish ("No, the Jewish boy does not want to be Jewish," "Yes, he wants to Christian," "Yes, the Christian boy wants to be Christian," "No, he does not want to be Jewish") appears in the responses of 8 per cent of the Christian children in response to the *Synagogue Picture* and 7 per cent in response to the *Jewish Holiday Picture*; it does not appear among Jewish children. Conversely, the pat-

tern of exclusive valuation of Jewish (yes-no-no-yes) appears in the response of Jewish children (21 per cent on the Synagogue Picture, 11 per cent on the Jewish Holiday Picture) but not in the responses of Christian children.

The Jewish children express themselves emphatically in choosing Jewish in preference to Christian. About 20 per cent of them accompany their choices with some variation of "I'm glad I'm Jewish," "I'm proud of it," "It's nice to be Jewish," probably manifestations of values developed in the family or in religious training.

Jewish children refer to experiences in Hebrew School or synagogue or with Jewish customs as reasons for their choices:

"Yes (these boys are glad they are Jewish), because they like to go to the synagogue and pray to God. And then when there's certain holidays sometimes the shules give them parties."

"Yes—because they have more holidays off."

Jewish children who regret being Jewish (there are 6 per cent on Synagogue, 12 per cent on Non-Barrier, 27 per cent on Holiday, and 33 per cent on Barrier Picture) give reasons which are no less emphatic than the reasons of the children who indicate positive valences, thus:

"No—he don't like to be Jewish, I don't like to be Jewish either."  
(*Kindergarten.*)

"No—because most of the kids are Italian." (*Second grade.*)

"No—because he wants to get presents from Santa Claus. They (others) do; they get Christmas trees." (*Second grade.*)

From the point of view of the non-Jewish child there is divided opinion about the desirability of being Jewish. Those who say "yes" have frequently no way of indicating why, except to repeat that they like to be Jewish.

Other children see group membership as something that "God made him" and, therefore, something one accepts. (This occurs for Catholic and Protestant, too.) This appears in elaborated form in the Christian child who sees the Jewish boy as glad he is Jewish:

"'Cause if God makes me into an Americann he made him into a Jew. You have to be lucky in what God makes you. Sometimes he makes you into a colored boy."

This response illustrates much more than a reason for supporting an affirmative response to the membership question. It is an eloquent expression of a point of view of a "majority" group child who sees himself as fortunate, on the top of a ladder of advantage; who sees a static and determined order of better and less good things to be.



The negative valences for Jewish stem from many considerations in which differences of language, customs and religion are seen as "not as good as" that with which the child is familiar.

"Jews don't learn about God. My father told me."

"Better not to be a Jew, 'cause you can eat whatever you want. You can have meat and milk."

These and similar references to customs represent one level of rejection of Jewish based on what might be seen as behavior or characteristics which can be presumably "corrected." Much deeper is the rejection in which persons are perceived as "bad" because of group membership per se—with an inevitable, unchangeable quality about the badness. The negative valences of about 12 per cent of the non-Jewish children is of the second type, such as "Jewish is bad" [and conversely for Jewish children, "Christian" equals "bad" (5 to 8 per cent)]. Particularly in the questions which ask "Would Jewish boy like to be Christian?" and vice versa, these inherent qualities of badness, goodness, and better-than appear.

Just one step removed from saying the person is bad are many children who project rejection of being Jewish, saying that "Jews don't have friends" or that "other people don't like them," in which statement there is the assumption that there is some reason for this social prejudice inherent in the group rejected.

Perspective on the meaning of the data on valences of various group memberships may be gained by seeing them in the light of a series of hypothetical reactions which represent the range of possible responses.

(a). One could imagine the situation in which own and others' group were sharply demarked and in which there was extreme in-group chauvinism coupled with strongly deprecatory attitudes toward the out-group. This situation should be manifested in response to the interview questions of the nature indicated in Table K.

TABLE K

1. Does X (own-group) want to be X?	Yes—100%
2. Would X like to be Y (others-group)?	Yes— 0%
3. Does Y like to be Y?	Yes— 10%
4. Would Y like to be X?	Yes— 90%

The response patterns of the two groups responding would be perfectly negatively correlated.

(b). Or, one could imagine the valuation of groups to be such that different groups are respected, valued more or less equally, with variations in strength of positive valences. Responses in this case might approach the figures given in Table L.

TABLE L

1. Yes	75%
2. Yes	50%
3. Yes	70%
4. Yes	60%

(*c*). A third situation would be similar to the first, but in which group antagonism was accompanied by a marked difference in the status of the groups concerned. In this case the high status or majority group and low status minority group would respond as indicated in Table *M*, assuming *X* to be majority and *Y* minority members.

TABLE M

	Majority	Minority
1. Does <i>X</i> want to be <i>X</i> ? Yes	100%	100%
2. Would <i>X</i> like to be <i>Y</i> ? Yes	0%	0%
3. Does <i>Y</i> like to be <i>Y</i> ? Yes	10%	20%
4. Would <i>Y</i> like to be <i>X</i> ? Yes	90%	85%

The children's yes-no responses and their reasons approximate, for a considerable proportion of the children, hypothetical Situation (*b*) with regard to the valuation of Catholic and Protestant. If a child rejects one of these groups he is not very likely to see members of the rejected group as rejecting themselves; in other words, he may have strong loyalties toward his own group and find much to reject in Catholic for example, but he nevertheless does not perceive Catholic children as rejecting themselves. To a great extent the valences—particularly the valences of the others' group—are attached to the institutional characteristics or the customs of Protestant and Catholic; only to a small extent is there perceived an inherent good or bad in the group members.

Jewish and Christian valuations approach (though not strongly) hypothetical Situation (*a*), of high valuation of own group and low valuation of the other group. The group statistics mask the responses of a few Jewish and Christian children who are perfectly represented by Situation (*a*), and a few Jewish children whose attitudes are represented in Situation (*c*), the beginnings of minority-group "negative chauvinism."

Much more than with Protestant and Catholic, Jewish and Christian (for some Jewish children Christian is synonymous with Catholic) valences are attached to inherent personal aspects of Jewish or Christian; many are also attached to custom and religion.

By way of comparison, the parallel data on valences of Negro and white come much closer to Situations (*a*) and (*c*) than do the responses toward any of the religious groups.

## VIII. THE RELATION OF INDIVIDUAL AND ENVIRONMENTAL VARIABLES TO CHILDREN'S SOCIAL PERCEPTIONS AND ATTITUDES

Existence of the kinds of social perceptions and attitudes toward groups which the preceding data reveal leads to the basic problem of how they are learned. It is not likely that the solution to this problem will come from the discovery of any single factor of all-determining importance. Research which has set out to find correlations between attitudes and single isolated variables within the person or his environment has not met with great success.

Like all learning, the perceptions of social groups and of the self as a group member develop in a field of interdependent relationships of person-in-an-environment. A field approach which tries to see at one time the interactions of factors of personality organization and of environmental stresses and experience offers the most promising approach to the problem of how attitudes are learned.

This research was designed not primarily to discover the genesis of attitudes but rather to determine their nature in the early stages of development. Therefore, the data in this study which offer clues to origins and influences fall far short of the ideal field approach. Certain tentative conclusions can, perhaps, be drawn from an examination of the variations in perceptions and attitudes which are correlated with differences in the following variables occurring in the sample: (a) The *neighborhoods* in which the schools are located. They represent different patterns of community life—in terms of group composition, economic level, and social customs (see Section II). They do not allow a neat control of one factor at a time; they furnish only six different community patterns, each with its own distinct features. (b) The *age differences* in the subjects. The children were selected from three grade levels, with an age range from five to eight years. (c) *Sex differences*. (d) The sample includes children of each of the racial and religious groups about whom attitudes and knowledge have been studied in this research. It is possible, therefore, to analyze the effects of group membership in young children, especially the dynamics of minority and majority rôles. (e) *Personality differences*. Few data were available on the personalities of the children. Limited case studies were carried out on a few children whose test records illustrated various types of responses to group awareness and prejudice.

TABLE 22  
KNOWLEDGE AND FEELINGS ABOUT RACIAL AND RELIGIOUS GROUPS IN EACH SCHOOL SAMPLE\*  
(Percentage of children)

Schools*	Knowledge (specific or extensive)	Feelings			
		Implied or Explicit Rejection		Implied or Explicit Acceptance	
		By Negro	By white	About Negro By Negro	By white
1-100% Negro		18	—	14	—
2- 0 Negro	(Not ob- tained)	—	71	—	0
4-10% Negro		33	61	14	0
5- 2% Negro		—	71	—	0
6-95% Negro		17	(all 4 cases)	0	0
About Catholic					
		By		By	
		Cath.	Non-Cath.	Cath.	Non-Cath.
1- 0 Catholic		—	4	—	11
2-34% Catholic		45	52	20	12
4-47% Catholic		44	31	0	6
5-33% Catholic		64	22	9	7
6- 1% Catholic		—	27	—	12
About Protestant					
		By		By	
		Prot.	Non-Prot.	Prot.	Non-Prot.
1-100% Protestant		0	—	0	—
2-65% Protestant		36	15	0	5
4-48% Protestant		13	30	0	0
5-18% Protestant		0	2	0	4
6-98% Protestant		6	—	0	—

TABLE 22 (continued)

Schools*	Knowledge (specific or extensive)	Feelings					
		Implied or Explicit Rejection			Implied or Explicit Acceptance		
		About Jewish		About Christian		By	
		Jews	Non-Jews	By Chrs.	Non-Chrs.	By Chrs.	Non-Chrs.
1- 0 Jews	—	—	4	—	25	—	4
2- 1% Jews	—	—	29	—	38	—	2
4- 5% Jews	Both cases	—	30	(1 case)	31	(1 case)	0
5- 39% Jews	64	—	48	10	37	45	8
6- (1 child in sch.)	—	—	6	—	21	—	6
<hr/>							
		Chrs.	Non-Chrs.	By Chrs.	Non-Chrs.	By Chrs.	Non-Chrs.
1-100% Christian	2	—	—	0	—	4	—
2- 99% Christian	13	—	—	2	—	11	—
4- 95% Christian	7	—	—	0	(1 case)	5	0
5- 61% Christian	7	—	5	4	18	15	5
6- 99+ % Christian	18	—	—	5	—	12	—

\*Percentages of racial and religious groups based on estimates of school district population.

## A. NEIGHBORHOOD DIFFERENCES IN RESPONSES TO PICTURES

The test results from the five schools (School 3 was not included in the comparison because it has only a kindergarten group) show varying degrees of similarity and difference in group awareness and attitudes (see Table 22).

There is relatively little variation among the neighborhoods in the responses of white children. In all schools but 1 and 6, which have 100 per cent and 94 per cent Negro population respectively, a high proportion of the children express hostility toward Negroes. The presence or absence of Negro children in the three schools appears to have little influence on the attitude of white children. Thus, in School 4, where 10 per cent of the school population is Negro, 61 per cent of the white children are hostile; in Schools 2 and 5, where there are 0 per cent to 1 per cent respectively of Negro children, 71 per cent of white children are hostile. The kinds of stereotypes about Negro do not vary with the neighborhood. One is led to conclude that racial prejudice is so widespread that the sample's differences in neighborhoods do not alter the perception of white as "good" or "bad." Nor do they alter the form of perceived social rejection and exclusion.

On responses to religious groups, greater neighborhood differences appear. The degree of familiarity with and the kind of meaning about each group vary. In Schools 2 and 4, where Protestant-Catholic is an issue in the community (particularly in School 2), a relatively high proportion of children give some information about these groups. Catholic and Protestant are identified by contrast with one another. Catholic means mainly "Catholic school" or "Catholic church," and Protestant is "church" and "school" (public). Jewish is a familiar identification in Schools 2 and 4, though there are few Jewish people in the neighborhoods. Its meaning is chiefly a social distinction of people different in some respect—language, foreign, not American, et cetera.

In School 5, there is quite a different meaning of religious groups. The neighborhood conflicts are in terms of Catholic and Jewish, not between institutions, but groups of people, and the children's knowledge reflects these neighborhood characteristics: Catholic, for non-Catholic children, means "people" who are not Jewish or who are Italians. Though 73 per cent of the Jewish children are aware of Catholic as the out-group of people, only 22 per cent describe Catholic in terms of educational or religious practices. Jewish has the same type of meaning to the Catholic children of School 5; it is not Italian or not Catholic.

That the Negro children give little information on Catholic, Protestant,

or Jewish would, at first thought, seem strange since they are all Protestant children themselves, and since in the white population bordering School 1 there is a high proportion of Jews and many Jewish-operated stores. In terms of perception, these results are readily understood: the perceptual field is one of colored and white. This distinction is very sharply drawn and differentiations within white are weak by contrast. Interview data supporting this interpretation appear on the Religious Barrier Pictures. After identifying the peripheral child as Protestant, Catholic, or Jewish, the interviewer asks "What are these children?" and frequently the identifications by Negro children are in racial categories. Even in some of the other pictures, race is injected. In reply to the question, "What is Jewish (Protestant, Catholic)?" it is the Negro children who say "white."

The feelings expressed toward groups in different neighborhoods reflect many of the same factors as the information about groups. Only in School 2 is any appreciable feeling expressed toward Protestant. Twenty per cent of the Protestant children indicate acceptance of or pride in their own group. The Catholic children from the same school who express feelings about Protestant (9 per cent) are divided evenly between friendly and unfriendly feelings. "Catholic" too elicits expressions of affect from many in School 2, with more rejection (20 per cent) than acceptance (12 per cent) from the Protestant children; and more acceptance (20 per cent) than rejection (5 per cent) from the Catholic children. The feelings regarding Catholic are not very different in School 4. School 5 does not differ in amount of positive and negative reactions to Catholic, but, as evident from the data on meaning of group, the rejection is in the context of Catholic-Jewish conflict.

Neighborhood variations do not alter the ratio of high rejection and low acceptance of Jewish by non-members of the group. Even among the Negro children (Schools 1 and 6) who give almost no description of Jewish, the ratio is the same.

The quantitative data on attitudes give the impression of greater neighborhood similarity than is gained in analyzing qualitative aspects of the responses. Here appears a most important difference, one of contrasts in the salience and vividness of group factors from one community setting to another. For example, in School 5 concern about Jewish or Italian or Catholic is linked with daily experience:

"I'm scared of kids. There's a (Catholic) school called ———. They are fresh from there. My boy friend and I are scared of them."

"I am friends with lots of Jews around my street."

"Catholic people are no good. Some people just hate Catholic people."

In Schools 2, 4, and 6, though a clear idea of Jewish exists, it is more remote in the child's life, for he experiences little about Jewish at first hand. Similarly, the awareness of Catholic in School 1 ("Catholic is Catholic School," "Catholic means church") is apparently neither affecting the child's daily life nor is it important to him. Descriptions of school and church when they appear in Schools 2 and 4 tend to be elaborated with a quality of involvement and valuation—Catholic school is good or it is bad and it is where certain things happen to you.

From these data, some of the influences of neighborhood factors are apparent. His neighborhood is understood by the child in its social aspects as well as in its more obvious characteristics of physical space, and the attitudes and perceptions he expresses reflect the environmental situation in which the social learning has taken place.

#### B. AGE CHANGES IN RESPONSES

It is apparent that the child's social values and prejudices are not purely a function of age, even at this early level of childhood. One cannot say that the five-year-old does not have prejudices and that the seven-year-old or twelve-year-old does. There are, however, certain differences which appear in the comparison of responses from the kindergarteners and second graders—differences which are cut across by individual and environmental factors. There is, in general, an increase with age in the percentage of children who express prejudices and who show an awareness of group tensions in society.

Age trends in attitudes toward the Negro show a steep rise in rejection of Negro. The answers to "Will they ask the (colored) boy to play?" is "No" in:

43% in white kindergarten	35% in Negro kindergarten
67% in white first grade	46% in Negro first grade
75% in white second grade	60% in Negro second grade

Elaboration of rejection of Negro because of race shows an increase as follows:

34% of white kindergarten	48% of Negro kindergarten
48% of white first grade	34% of Negro first grade
61% of white second grade	43% of Negro second grade

Projection of group tensions beyond the picture situation appears in:

55% of white kindergarten	30% of Negro kindergarten
57% of white first grade	45% of Negro first grade
82% of white second grade	49% of Negro second grade



The rise is not only rapid, but it reaches extremely high proportions in the white children. The trend is upward for the Negro children too, though not as rapidly as for white children. The two trends represent quite different dynamic factors for each race. The increase in prejudice with age for the white children is relatively "easy," for it encounters little opposition from opposing forces in the culture. The reactions of Negro children, on the other hand, involve opposing forces: forces toward increasing rejection of Negro, which are in line with the mores of the dominant culture ("I wish I was white"); forces which arise out of a need for self-acceptance ("Negro looks as good as white"); and forces toward aggressive retaliation against the whites.

The age trends on expressed hostility toward religious groups are upward. On the Religious Symbol Pictures, hostile interactions are described with the frequencies at each grade level indicated in Table N. The proportions of

TABLE N

	Kindergarten	1st grade	2nd grade
Between Jews and non-Jews	14%	30%	44%
Between Catholics and Protestants	20%	25%	40%

interpretations which use the group factor to account for hostility are given in Table O. Analysis of friendly responses reveals no consistent age trends.

TABLE O

Kindergarten	1st grade	2nd grade	
6%	12%	26%	for hostility between Jews and non-Jews
7%	9%	6%	for hostility between Catholics and Protestants

The projections of religious group tensions beyond the picture situations, as in Negro-white relationships, indicate an increase in awareness of discrimination with age.

Aside from the quantitative age trends on race and religion, there are qualitative differences in responses. Increasingly, group labels come to be people, firmly and integrally a part of them. The first meanings of the labels are many times apart from people, and stand for small segments of experience or teaching which are not incorporated into any kind of "group concept." The fragments may have strong feelings and convictions attached to them, but in general less so than when labels mean people. Typical of responses without strong conviction are the kindergarteners who say:

"Yeah (he is glad he is Catholic), because I guess he is."

"No . . . because he wants to play."

But, lest the differences just described be seen as wholly a matter of age development, the responses of another kindergarten child, for whom Catholic and Jewish have already developed a basic belonging to people, are given:

"(He is glad) because God made him Catholic."

"No (he isn't glad). I certainly wouldn't want to be that because I'm Jewish."

"Yeah. Ones what's Polish supposed to be Polish is glad, and ones what's Jewish is supposed to be glad."

The maturing of social attitudes and concepts of groups into a philosophy about groups is found in a very small number of the children. It is most frequent in second grade children. The following are samples of philosophy from second graders:

"I like any kind—Catholic, Jewish, or any kind. Any kind of Protestant. Any kind of people except bad people like Germans and Japs."

"Because as long they're still Americans, it doesn't matter what kind they are."

"I like any kind of kids. My boy friend is Jewish but I like him, he is nice. He spends all his money on me. He is a nut spending all his money on me."

Such group philosophies appear three times in the kindergarten, four times in the first grade, and 11 times in the second grade.

### C. SEX DIFFERENCES IN RESPONSES

Theoretically, sex differences might be expected in social attitudes, deriving from differences in social standards for boys and girls. If one were to assume such an influence, however, it would be difficult to predict the direction of influence. Boys are, perhaps, freer than girls to explore the community and thus become acquainted with its tensions and prejudices or become acquainted with the people and reject the prejudices about them. On the other hand, girls, receiving more "protection" in the family, may also learn these prejudices but in the form of warnings and precautions.

Boys and girls from the total sample have been compared with regard to the ideas and feelings expressed about each group (Table 23). Nowhere are the differences large, nor is there a consistent difference between the sexes. The largest sex difference is in feelings of rejection toward Negro. This is a spurious relationship, however, since the proportion of boys and

girls differs for Negro and white children. (There is a larger proportion of white children among the girls.) Thus, the greater hostility toward Negro on the part of girls is more a function of race differences than sex differences.

In sex comparisons on knowledge about groups, girls show a small unreliable advantage. The kinds of information given by girls and boys do not differ.

TABLE 23  
KNOWLEDGE AND FEELINGS ABOUT RACIAL AND RELIGIOUS GROUPS BY BOYS AND GIRLS\*  
(Percentage of children)

Group	Specific or extensive information		Rejection		Acceptance	
	Boys	Girls	Boys	Girls	Boys	Girls
Negro	19*	24*	44	58	5	3
White	—	—	10	7	38	44
Catholic	28	35	7	13	11	15
Protestant	7	13	1	0	2	7
Jewish	26	34	25	30	10	8
Christian	10	6	3	3	9	7

\*For Negro, the percentages on knowledge indicate spontaneously offered ideas or concepts about Negro.

There is little evidence in the data that, for the ages studied, awareness and attitudes about groups are affected by special social sex rôles and resultant need differences associated with sex.

#### D. GROUP MEMBERSHIP DIFFERENCES IN RESPONSES

Membership in a group determines a number of important aspects of the psychological field in which the person lives. Whether it be his family group, age group, occupational group, or his racial or religious group, some of the effects of group membership are the same: Being on the inside or outside of a group determines what certain kinds of behavior are possible, and what goals are accessible or inaccessible. Position with respect to a group influences the perception of one's surroundings. Similarly, many values of the individual arise from group membership and the valences of groups are determined partly by the individual's position, whether inside or outside certain groups.

The effects of group membership on the child may be real and considerable without his being at all aware of or concerned with the groups to which he belongs. Such effects may be expected to the extent that his race or religion exposes him to a particular set of values and group of experiences and kind of relationships to other people. On the other hand, as observed repeatedly

in the preceding data, the child may be both aware of and concerned with his group-belonging. In many children group identification is part of self-identification, and it enters into their evaluations of self and of others. Thus, a Protestant child responds, "I'm glad I'm not Catholic. I'm not going to be Catholic. They are bad."

Some of the effects of group membership are seen in the comparisons of data on knowledge and feelings expressed by children of each race and religion (see Table 12 in Section VII and Table 24 in this section). Perception of the surroundings varies among the subgroups. Each is most aware and most accepting of its own group. The ratio of own-group acceptance to own-group rejection is about 5 to 1 (Table 24) for Catholic, white Protestant, and Jewish children. Negro children, however, give more negative reactions to their own race (22 per cent) than accepting (12 per cent).

TABLE 24  
FEELINGS TOWARD RACIAL AND RELIGIOUS GROUPS RELATED TO GROUP MEMBERSHIP OF  
CHILDREN: PERCENTAGE OF CHILDREN EXPRESSING ACCEPTANCE OR  
REJECTION OF EACH GROUP

Feeling toward	Catholic		Protestant		Jewish		Christian		Negro		White	
	Ac- cept	Re- ject	Ac- cept	Re- ject	Ac- cept	Re- ject	Ac- cept	Re- ject	Ac- cept	Re- ject	Ac- cept	Re- ject
<i>Children</i>												
<i>White:</i>												
Catholic	28	5	3	3	5	31	9	3	0	69	61	0
Protestant	15	17	10	2	0	40	10	0	0	66	59	0
Jewish	0	21	0	3	47	9	9	15	0	71	44	0
<i>Negro:</i>												
Protestant	9	3	0	0	7	22	7	1	12	22	15	22

(Feelings about Catholic and Protestant from Mass Picture; feelings about Jewish and Christian from Synagogue Picture; feelings about Negro and white from Race Barrier Picture.)

Group identification is not an equally salient feature of the self for all children or for children of all groups in the sample. Jewish children seem much more concerned than either Catholic or Protestant children. They describe their own group most extensively. Also, 44 per cent of the Jewish children project "Jewish" into pictures in which it is not identified by the tester. Such projection of own religious group occurs in only 20 per cent of the white Catholic and Protestant children, never in the Negro Protestant children. Again, by identifying themselves in the process of interpreting the pictures, the Jewish children give evidence of greater concern with group belonging than Catholic and Protestant children. Self-identifications (in religious group terms) are made by:

49% of Jewish children  
30% of Catholic children  
27% of white Protestant children  
0% of Negro Protestant children

Awareness of an out-group from which they are set apart is also more frequent in Jewish than in Catholic and Protestant children. (Note the high recognition of "Christian" by Jewish children as something "not Jewish.") (See Section VII.)

Doubtless, the intensified group consciousness of Jewish children is, in part, an outcome of anti-Semitism, which makes being Jewish relevant and important in many other areas of the child's life than religion alone. It is probably the effects of anti-Semitism seen in the reactions of acceptance and rejection in Table 24; namely, that Jewish is the most rejected group and the group rejecting most. The complete absence of positive response toward Catholic and Protestant from Jewish children and the high negative response toward the same groups are probably in reaction to feelings of being rejected. The high acclaim of own group in positive terms by 47 per cent of the Jewish children and the equally strong rejection of own group by 9 per cent of the Jewish children may have similar roots in anti-Semitism.

Personal involvement in being Protestant or Catholic is far less evident in the reactions of the children. *Awareness of self as Protestant appears almost exclusively in School 2, in which identification with the group is made in a competitive manner of liking it more or of its being better than another group (usually Catholic group). Catholic children are only slightly more conscious of themselves as Catholic. (Recall the selective factor in the Catholic sample in which are present only Catholic children who do not attend the Catholic schools available in the immediate neighborhoods.)* Being Protestant or Catholic does not, within this sample, affect differently attitudes toward Jewish, Christian, Negro, and white (Table 24).

More than belonging to any of the religious groups, racial membership is seen to have considerable effect upon the psychological field of the member. Most devastating are the results of racial minority status on the Negro children. It creates a perceptual field in colored and white terms, which differentiations are dominant over all others. (Thus, Negro children do not identify themselves with reference to a religious group belonging. Secondly, in the Mass Picture, the tester's structuring of the situation as one of Catholic children coming to school is brushed aside by 12 per cent of the Negro children who say, in essence, that what is more important in the picture is that "they are all white children.")

More than religious membership, racial membership is perceived as making certain goals inaccessible; it imposes definite limits on play and friendships.

The minority group phenomenon of "self-hatred" has developed most extensively among the Negro children, manifested in a variety of symptoms. There is seldom a reference to themselves as Negro and as feeling pride or satisfaction in being Negro. There is effort to emulate the white and poignant expression of self-rejection.

Although many children who show self-awareness in group terms show also accompanying evaluations of "good" for own-group contrasting with "bad" for out-groups (or, in the minority child, a conflict between this and the reverse evaluation), it is an error to assume that such attitudes of superiority-inferiority and of hostility are necessary consequences of awareness of one's own group membership and of cultural diversities in race and religion. The error in this assumption lies partly in overlooking the kind of social learning situations in which the child's awareness develops, in which he has opportunities to learn about group differences. He experiences cultural patterns of prejudice which do more than recognize the objective physical differences between Negro and white and the differences in religious customs of Catholics, Protestants, and Jews. Rather, these differences are brought to the child's attention in a very selective sampling of situations. Negro is witnessed as the poor colored section of town, or Negro is made an important part of the report of a crime, or Negro is made a synonym of bad or dirty. There are few circumstances in which the culture links Negro with the favored or desirable. Similarly, Catholics, Protestants, or Jews are more frequently blamed for the bad state of politics, economics, or morals than they are appreciated or accepted as different in their own religious customs.

Within the variations of self-awareness in the children in the study, there is further evidence that awareness of differences is not necessarily the cause of or sustaining aspect of prejudice. There is no correlation between the children's ability to differentiate groups, his own or others, and the kinds of feelings expressed toward them.

Among the subjects who specify their own group membership, not all view it with attitudes of superiority. Thus, "I'm Catholic. Al (is Protestant). He's my boy friend. They (Catholics) go to instructions and they (Protestants) go to church," and "I like any kind—Catholic, Jewish, or any kind. Any kind of Protestant. Any kind of people except bad people like Germans and Japs."

*Exaggerations of the group aspects of self-identity* are found mostly in the children in minority status. It is not difficult to understand the learning which has taken place. If the child is excluded from play and is made fun of by other children, if his father does not get the job, if his family cannot move into the house they want because of race or religion, it may be expected that group identity will become an important part of many more areas of the child's life than those in which it is basically relevant.

### E. PERSONALITY VARIABLES

For purposes of analysis, the test responses have been the main focus of attention in this study. In the preceding discussions, the responses have been interpreted in the light of the social and psychological environments in which they occur. It is important, also, to look at these data as part of a child if one is to understand the rôle of group factors and social attitudes in the life of the individual. For the latter purpose, a number of children were selected for individual study. They were chosen on the basis of their test responses: (a) children whose responses indicate awareness of groups without prejudices toward them, (b) children who express hostility toward one or more of the groups, (c) children whose attitudes are not crystallized, contain some contradiction or ambivalence, (d) children for whom group factors constitute an area of conflict or anxiety.

In addition to test interviews, personal data were obtained on the child's relationships in the home and school. The sources of data on the home were an interview with the child's mother and the child's drawings of his family. Both were obtained by the teacher. The interview with the mother concerned her feelings toward the child; her description of his personality; her hopes, disappointments and irritations attached to the child; the family atmosphere; and the child's rôle in the family. The child's drawings sometimes supplied additional data on his perceptions of his family and his rôle in it. Data on the child in school consist of the teacher's personal reaction to him and her perception of his rôle among his classmates.

The data have been treated as case studies with no attempt at quantitative analysis. Six cases are presented, in which interpretations are made of the interrelations of child personality, home, school, and neighborhood factors as they relate to current theories on the development of attitudes and prejudice.

#### 1. Case of John

In the case of John, the patterns of social perceptions and attitudes concerning groups are very evidently rooted in and consistent with the child's personality and the social environment in which he lives.

John is 7 years, 4 months old, in the second grade in School 5. His family is Catholic, of Italian descent. His teacher describes John as not outstanding in the classroom, generally coöperative, "well-mannered" and pleasant in his reactions toward her, only moderately congenial in his relationships with his classmates.

The interview with John's mother and his drawings of his family are more revealing of John's personality. Father and mother, five-year-old sister and John form the family group. Both parents work, but one or the other is usually able to be at home when the children are not in school. John's teacher had arranged to interview John's mother at home in the evening in order not to interfere with Mrs. M's work schedule; however, Mrs. M. was so alarmed by the teacher's request for an interview and so anxious lest John had "done something wrong" that she took a few hours off from work to come to school. Mrs. M. spoke about John with both interest and love, describing his play, his love of music, and the good times the whole family has together; they go to movies and picnics and every evening after dinner, they sit and talk and play games. When John had trouble with arithmetic, they made up a number game to play.

But with all the apparently good home situation, Mrs. M's basic anxieties concerning her child soon appear and dominate her interview. To her, John's shyness is his great problem.

I wish he would be more forward. . . . Of course, maybe it's good. He's not fresh or brazen, but he's so sensitive and cries so much. He and his sister are always arguing. She's very forward and he's just the opposite. He is very bashful. He's sensitive. She will stand up for her rights and for those of her brother, too, but John never fights back or tries to show his point of view. He just goes up to his room and cries. Later, if he has done something wrong and been scolded for it, he'll come back and apologize.

This intragressive reaction to implied threats of rejection from his mother and John's concern about "wrong" are probably associated with the religious precepts he has been taught: "John knows right from wrong. . . . If John should do something wrong, his sister will tell him 'God will cry.'" It may derive to some extent from parental anxiety lest the children do something wrong:

"He'll never take anything—even around the house. He always asks if he may have a piece. . . . When I asked him if he had done something wrong (with reference to interview requested by the teacher) he said, 'I wouldn't steal. That's bad.'"

In the mother's accounts of John's social behavior, there appears a general



inhibition of aggression toward others, guilt feelings about aggression which are expressed, and a generally timid, fearful attitude about himself, coupled with an eagerness to do the right thing and to be accepted.

John's drawings of his family confirm some of the mother's accounts of the family and John's rôle in it. On the first of two drawings, John draws large, bright figures of his father and sister. His mother is drawn in black. He represents himself in a thin, pale brown, shadowy form, without features or distinctness of any kind. He is only one-quarter the size of the figure of his younger sister. He places himself next to his father, commenting on his father's bravery and strength, and his own fears. In a second drawing, two weeks later, the family is pictured on one of their picnics. Again, the father and sister dominate the scene and John appears again as smallest and having only an indistinct brown outline.

The test responses reiterate the personality patterns defined in the home and school. They constitute another area of insecurity. One is impressed (a) by the tremendous awareness and extensive differentiations of social groups and (b) by the anxieties engendered by a conflict of values with respect to group relations. John is not only responsive to the group identifications given by the tester, but himself introduces German, Japanese, Irish, and American references. On the Mass Picture, given only the group label "Catholic," John creates his own distinctions of Jewish, Irish, and Italian. He is keenly aware of all the variations of group hostilities, and he is familiar with many beliefs hostile to the groups concerned. At the same time, he speaks seriously of the general maxims that "it is not nice to fight" and "one should be kind to everyone." His own personal sensitivity to rejection makes him particularly sensitive to the effects on others of exclusion because of group membership.

In the Race Barrier Picture, he mentions an incident of "a little colored boy who killed a white boy with a knife" and reveals consciousness of group tension in such statements as (the colored boy isn't playing) "because they won't let him play. If he was a white boy, they would let him play." At the same time, he allows for the possible desirability of being colored: "Sometimes they want to be a colored boy to be tough if he gets into a fight." He objects to white exclusiveness: "Even if he is colored they *should* let him play." And he expresses forcefully the feelings of the rejected colored boy: "Sure (the colored boy will ask the whites to let him play)! Because he wants to play with them. He don't just want to stand and watch them!"

Similarly, on the Synagogue Picture, he mentions beliefs hostile to the Jews ("Some think the Jews killed God") and tensions between Jews and

Italians ("If these are Italians, they wouldn't like these"). He denies his own belief in the stereotype and says: "I think the Romans killed God." However, one is led to suspect a real personal anxiety in the area of Jewish and Italian relations, for again and again without direct stimulation, these groups are projected into the pictures, hostile and friendly interactions alternating, moral precepts punctuating the interpretations. Thus:

*Would these children sometimes like to be Protestant?*

"You see if they's a lot of Jewish people, well, say there's only one Jewish boy, and all these people were Italians and they would call him dirty names and then more Jewish families come in from the country and the Italians moved out, and then there would be more Jewish boys than Italians, and then they would call him names too. . . . They (the children) would play, but you know, some people don't like other people. . . . They should be friends."

Throughout his interviews, John alternates from dispassionate observer to participant and sympathizer. He quickly refutes all expressions of aggression with a hasty re-affirmation of the "right." In John's case, the impact of contradictory cultural values is dramatized: the influence of the home's conscious training in moral precepts and the influence of social group mores which enforce exclusiveness and rejection (recall the characteristics of Neighborhood 5). Involvement in conflicting social values is not infrequent in the process of socialization and is inevitable so long as the culture in which children are brought up maintains double standards for ideals and practices. In John's circumstances, children of quite different personalities from his would also experience conflict. Differences in resolution of the conflict and in effects of the conflict would be expected according to differences in the life situations of each child. The importance which this area has for the child, his own experiences with group prejudice, the satisfaction or punishments which he has experienced from behavior in line with either set of values, and the sources from which the conflicting values derive would influence the child's response to the conflicts.

An already insecure child such as John is not likely to find the resolution easy. One might hazard the prediction that his behavior and attitudes toward groups will be dictated by the demands of the immediate situation in order to avoid taking a stand different from the others; and will not, therefore, be following consistently one set of values. Or perhaps, as in his present daily behavior, withdrawal from problems will be John's main method of meeting problems of group life.

## 2. Case of Donald

Donald was selected from the sample because he shows an awareness of group differences—Negro, white, Protestant, Catholic, and Jewish—and a familiarity with some of the customs governing group relations. His personal involvement either is small or is successfully concealed during the interviews. His reactions are so completely lacking in feeling as to suggest a guarded reserve in all pertaining to the interviews. Donald responded to pictures and questions in a serious, conscientious manner, answering each question in testlike fashion, neither hesitating nor omitting.

Donald, 6 years, 9 months, is a Negro child in the first grade of School 6. The teacher's description of Donald coincides with that of his mother which follows. She says that he is very well liked by all the children in his class; he is cooperative and generally unaggressive.

Data on his home and school life are illuminating background for interpreting the interview behavior. Donald's mother, who seemed very happy to be interviewed by the teacher, talked at great length. Her sole interest apparently is her children and their welfare. She explained that two years ago she separated from her husband and moved her family from South Carolina to Philadelphia. There are five sons, of whom Donald is the youngest. They all live with Mrs. J's sister. The family is supported by a monthly allotment from the oldest son, who is in the Navy, and Mrs. J is a part-time domestic worker.

Mrs. J stressed how *good* her children are and how hard she works to keep them "clean and decent." Donald is described as especially good, and loved by all the children on the street. Her stress on "*good*"ness seems to be synonymous with obedience.

"When Donald comes home from school," she says, "he gets something to eat and then practices writing numbers or words. That's my rule! Then he goes out to play but not too far from the house."

Mrs. J boasts that for a whole year after they had moved to this neighborhood Donald never went as far as the corner by himself.

She fears corner gangs and is trying to keep her boys from that kind of influence. In fact, she feels that it is a blessing that her baby girl died because she would worry even more about a girl in these times. She feels she can bring up her children properly herself, and it is "other bad children who teach them wrong things." When she felt that her husband's drunkenness was a bad influence, she left him, because she wants her children to learn to be honest and decent.

All the boys stay in at night, read and listen to the radio stories. She says her 12-year-old son has memorized much of the Bible and she is very proud of that accomplishment. The boys all go to Sunday School twice each Sunday.

In her concern for her children's welfare she has limited her working days away from home to three. "So I can have time to wash and iron for my family and supervise their home life."

The only significant feature of Donald's family drawings is inclusion of the father, even though he is constantly derogated by his mother ("He's a drunkard") and has not lived with the family for several years. In both drawings, Donald presents the family members in sizes that are proportionate to their age differences.

Returning to Donald's interview responses, his "good" behavior is consistent with the standards of good from his home. His perception of Negro-white relations is clear: (The boys are not asking him to play on the Barrier Picture, nor will he ask them) "'cause he's colored and they won't let him"; (on the Non-Barrier Picture, the children are not friends) "'cause one of them is colored." The rigidity of the racial exclusion leads to wavering preferences of belonging to Negro or to white group. (He's glad he's colored) "'cause he don't want to play with them" (white children); (He wishes he were white so) "he could play"; (Sometimes would the colored boy like to be someone else? Yes) "Sometimes he like to be white." In his conflict and in his awareness of white exclusion of Negro, Donald expresses no animus toward whites. It seems likely that some of his mother's fears about her boys going too far down the street or getting into trouble would be linked with racial problems. That race is not mentioned in the interview is probably because the teacher is white. The hard and fast separation of Negro and white children which Donald projects into the pictures may reflect his mother's warnings.

Unlike so many of the Negro children in the sample, Donald has awareness of and information about religious groups. He associates Jewish with religion and Catholic with Catholic school, Protestant church with "praying, singing, reading the Bible," and Christian with "preacher." The religious emphasis in the home no doubt accounts for his familiarity. He expresses no personal feeling for or against these groups but indicates awareness of unfriendliness among children because of these differences; thus, Question: "Are they friends (Jewish and Christian children)?" Response: "No, 'cause two's Jewish." Similarly he describes being Catholic as a barrier to friendly relations with non-Catholics.

If the control and protection supplied by Donald's mother is as complete as it appears in her interview, she may have circumscribed a "safe" area in which Donald can move without meeting the conflict of race at first hand. This would perhaps account for the awareness yet relatively little personal involvement which are shown in the interviews. His mother's love apparently supplies a security which her protective control could never provide. For the time being, at least, she has succeeded in keeping at a minimum any insecurity that stems from racial prejudice.

### 3. *Case of Richard*

Richard is a contrast to John both in group attitudes and personality. Richard is in the first grade in School 2. He is one of the oldest children in his class (7-9) and his rating on a group intelligence test is low average. His teacher describes him as most uncoöperative, hostile, and unpopular among his classmates. The tester notes on the interview record that he is a "dead-end kid" type. He was chosen for individual study because of the uninhibited hostility and aggression which he expresses throughout his interpretations of the pictures. His aggression is general as well as being construed in group terms. Even the theme of the "rapport" picture (child with hands covering face, standing slightly apart from three other children) is a hostile one; "The children have hit the boy who is crying." There are certain prominent characteristics in Richard's aggression themes. There is always the victor and the vanquished, never evenly matched combatants. The Barrier Pictures fall strictly into a structure of a majority group which excludes or aggresses, and the lone child who is excluded or submits. With little variation, his aggression is overt and physical. He finds pleasure in fighting ("I like to fight. I fight myself.") His identification is always with the aggressor.

His utilization of group labels as convenient handles for provoking hostile behavior is almost compulsive in nature. In response to the Race Barrier Picture, Richard immediately perceives and comments on the fact that the foreground boy is colored. When the tester says, "Tell me about this boy," Richard replies, "He's Jumbo. You can always tell by his hair," and he continues, "(He isn't playing) 'cause he's not like those. He comes from the jungles." When the tester confirms the identification of the boy as colored and asks about the desirability of belonging to one race or the other, Richard indicates there is unequivocal advantage in being white and disadvantage in being colored; he sees the barrier of race as established and maintained by the whites, "They don't like colored kids to play with them,"

and he gives no evidence of sympathy for the colored child, although he says, "Yeah (the colored boy would like to play)." The forcefulness of Richard's race prejudice is indicated by his reorganization of the Race Non-Barrier Picture which shows a colored child playing with three white children. He describes the picture in these words: "He's a little black Jumbo. He ain't playing 'cause they don't like him."

Richard's attitude toward Jews, as well as his general exultation in violence, is exemplified in the following responses to the Synagogue Picture: "No, the Jewish boys don't like to be Jewish because the Protestant kids don't like Jewish . . . those kids over here (Protestants), are going to beat those (Jewish) kids up, because they don't like Jewish. I could beat all those kids up." His emphasis on the excludedness of Jews appears again: "They don't be able to play with anyone else; they won't be able to get no boy friends."

Protestant-Catholic relations are also perceived as laden with antagonism, which proceeds mainly from the Protestants. On the Catholic Barrier Picture, immediately after the tester explains that the foreground boy is Catholic and that the other children are not Catholic, Richard interjects the statement, "They're Protestant. I'm Protestant." He continues by projecting religious membership as a barrier to the Catholic boy's playing. Even in response to the Religious Non-Barrier Picture, Richard does not relax his hold on exclusiveness. He says, "No (the little boy is not glad he's Catholic). He likes to be like them and go to the same church and school and all," and "No (the four children are not friends), 'cause one's Catholic and the other three ain't."

The personal data on Richard outside the testing situation confirm the picture of a hyperactive and highly aggressive child, but there is inadequate evidence on the sources and meaning of the aggression. His home has in it a number of sources of insecurity. The parents were separated for three years, during which time Richard's mother worked and his grandmother assumed responsibility for him. At present, the three children and the parents share the home of the grandparents. When Richard's mother resumed her parent rôle she found it necessary "to teach him what was right and what was wrong" because the grandmother had allowed Richard to do as he pleased. The mother-grandmother friction apparently continues in the present, for the mother commented resentfully that "She (grandmother) never leaves any of the other children come in and play with my children so they have to play outside."

Though the reasoning is mainly negative, there is nothing in the inter-

view with the mother which suggests a close and warm relationship with her child or feelings of satisfaction in his behavior or achievements. Rather, she selects to tell about him: "I like to go to the movies . . . but not Richard or (his sister). They never go. They like to play; that's all they got on their mind all the time. . . . When we have the radio on, Richard talks all the time. He never listens to that."

Assuming that Richard's aggression is the consequence of frustrations at home and at school, his hostility toward groups, expressed in the interviews, may be regarded as displaced aggression. In choosing Negroes, Catholics, Protestants, or Jews as substitute objects, he has selected a form of aggression which is not suppressed in his environment. As illustration of the scape-goat theory of prejudice, Richard's case is one among a number of children studied in whom personal insecurities and frustrations correlate with a high readiness to aggress against out-groups. That this theory is insufficient, however, either as an explanation for how the prejudice arose or as an answer to questions of therapy or change of prejudiced behavior, may be inferred from examination of data from the total sample: (a) Hostile group attitudes do not always appear in children who seem to be insecure or mal-adjusted. Hostile attitudes occur in children who appear to be happy and secure in home and school. (b) Recalling the very high proportion of children who express hostility toward groups, it would be necessary to assume frustration and need for substitute objects of aggression by most children. Further, it would be necessary to assume that in the derogation of and expression of hostile feelings against groups, there is obtained substitute value or catharsis.

Instead of interpreting the expressions against groups as real aggression on the part of the child, the possibility exists that the child's statements that "niggers are tough" or "dirty," that "Protestants go to Hell," and so on are learned first essentially without an element of hostility so far as the child is concerned. He learns them as part of the nature of things in the world, just as he learns to avoid the dangers of city traffic, stray dogs, strange men, and to evaluate noisy behavior in church or bringing mud on his mother's carpet as bad. If this is the case, therapy must deal with more than the child's frustrations or specific personal needs. This is not to deny the likelihood of evolution of some or all group derogations into acts of aggression and, as such, the theory of frustration and aggression is again important.

#### 4. *Case of Mary*

Mary's interviews contain a minimum of aggression and hostility, and at the same time show imagination in interpreting the pictures as well as recognition of the group identifications.

Mary is a big girl for her seven years and in the second grade at School 2. She is Protestant, she identifies her mother as Protestant, but does not recognize herself as such. Whether Catholic, Protestant, Jewish, or Negro is introduced into the picture, her initial themes of play and friendship are unaltered, except that the group identification may be incorporated into her stories. Group differences are certainly not seen as affecting play among children. The interpretation of the pictures are more clearly affected by what appears to be Mary's own timidity. Thus, on the Barrier Pictures:

"He's afraid he'll get hurt with the ball."

"Maybe he thinks that's a hard ball they're playing with."

". . . and that girl throws the ball back to that boy and he don't know it, maybe he'll get hit."

The generally accepting attitude toward group, as far as the interviews indicate, is not guided by any philosophy of "right" and "wrong" in human relations. She takes her cues for behavior and values from the sanctions of the parent, thus:

"I guess (this little boy is glad he is Catholic). If their mother wants him to be Catholic."

"If the mother wants them to be Catholic she can."

"I don't know. But my father does."

"(They would like to be Catholic). Maybe if their mother would like them to go to Catholic."

Although none of the attitudes toward groups is crystallized, all her associations about Catholic and Protestant are mildly pleasant, while there are indications of negative stereotypes about Jews ("They don't talk like us") and Negroes ("Sometimes colored people grab you in the back at night"). They are as yet not affecting her feelings toward the children of those groups.

In the light of personal data on Mary, her responses on the interview are evidently not the expressions of an aggressive affirmative stand for friendly acceptance of groups or persons, but are motivated more likely by her personal insecurity. Her home life (from the interview with her mother) is dominated by a strict, authoritarian mother, who is extremely critical of Mary, largely on the grounds that "Mary has no push. She allows the



other children to bully her and beat her up." Her criticism verges on the contemptuous, "All she does is stand there and cry." The teacher asked, "Does she come home crying?" and Mrs. R replied: "She does not! She knows better than that. I'd give her more than they gave her. . . . Many a time I push her out and tell her to pitch into them, but she just won't." This unrelenting attitude on the part of the mother and her dissatisfaction with Mary probably have a more basic origin. However, the only reason that Mrs. R gives is that her daughter is not a leader. Cleanliness in the home, a sense of duty about the routine of cleaning and washing, loom large in Mrs. R's values. Her only approving reference to Mary was in that area: "She's a good duster, and now she's going to learn to scrub the floor." Mrs. R at no point in the interview indicated where the father stood in his attitude toward his children, nor was there any hint of the mother's attitude toward the two younger siblings except that they "tie the family down." The general picture of mother-child relations as it concerns Mary is one of hard discipline, nagging, no love, and outright rejection by the mother—a perfect setting for feelings of hostility which could become scapegoat in character. However, in school, as in the interviews, Mary's behavior is most unaggressive and conforming in obedience to the adult.

Without additional personal data, a theory of Mary's behavior is highly speculative. Two possible hypotheses (both related to the theories discussed in the case of Richard) are (a) that the inhibitions to aggression are too great to allow expression of hostile feelings in the interview—the inhibitions stemming from Mary's fear of adult authority; she might be sufficiently uncertain of the kind of responses "expected" by the tester that she contrived to give only the most innocuous interpretations; or (b) that she has not learned many of the cultural prejudices about groups, hence the group identifications are not seen as relevant to her task of telling about the children in the pictures.

### 5. Case of Bob

Bob, 6 years, 2 months, according to mother and teacher, appears to be a happy, secure, loved child. At home he is surrounded by a large family of adults who have a very close-knit, affectionate relationship to one another. They are a Catholic family of seven boys and two girls, all much older than Bob; all but one are married and live nearby. Bob lives with his grandmother and mother. His father is dead. The grandmother and married sister (who lives across the street) share the responsibility of taking care of Bob while his mother is at work during the day. Mother, grand-

mother, sister are "devoted" to Bob. To the "easygoing" grandmother Bob is perfect. His mother is not only devoted to him but sees him as taking the place of his father. The closeness of the whole family is described thus: "We get together often just to get together. Everyone is welcome in the house. The house is always full." Bob's drawings of his family reflect this family structure. He is baffled by the wide age-range and marital status of his siblings, which introduce a confusion about aunt-sister-brother-cousin relationships. When asked to draw the family, Bob said, "I can't," then added, "I need to make a house first. I don't know how to make a family. Anyhow, they are inside the house. They don't show outside. Do you want me to bring them out?" He states his dilemma: "There's too many. I don't know them. There's ladies and mans. I can't make so many, but I will make my mother." This he did on the reverse side of the paper, placing her alone in the center and then re-drawing the house. "This is my mother's house. It has a garden. My mother likes a garden. So do I."

In the interview there is no criticism made of Bob. Dissatisfaction is expressed, however, about the neighborhood in which he must play. Mrs. T comments to the teacher about so many people moving out of the neighborhood "because of the colored." She emphasized the family's "Southern" origin and characteristics: "All Southerners are easygoing like Bob. We are all like that. We even look alike—blonde and blue eyes. You should see us when we get together." At this point, Mrs. T expresses another group attitude: "The only dark one is my sister's baby. He has brown eyes and brown hair, like his daddy. He is Jewish, you know. My sister married outside of her religion. When we get together, they seem like outsiders because they look different."

From the teacher's report on Bob (first grade, School 4), there is again a strongly positive response toward him. She sees him as the most popular child in the class, seldom quarreling with other children, coöperative with the teacher and "very pleasant" to have around.

Bob's apparently happy and secure personal life does not prevent his holding many hostile attitudes toward groups. He is especially hostile toward Negroes. This is in line with the sentiments expressed by his parent. His prejudice is expressed most vigorously in the picture of the Negro child and white children playing together: "No white people like colored, 'cause they kill people. A white hit a nigger over the head with all his might and killed him." Yet, having expressed so clearly the white rejection of Negroes, to the question, "Are they friends?" he replies, "Yeah, 'cause they know each other." His rejection of Negroes appears again on the

Barrier Picture when he describes, with gestures, that the colored boy would like to be white "'cause he has short hair and his hair sticks up like that." The white boy is glad he is white "'cause little white boys is better than a nigger and a little white boy can fight better."

Bob's family is Catholic, but Bob shows some confusion in deciding about his own group-belonging, thus:

*Question:* Do you know any Protestant children?

*Response:* Yeah. I'm a Protestant. I still go to Catholic church. I hate Protestant, I'm Protestant but I go to Catholic church.

Mixed feelings about Protestant in spite of his expression of hate are evidenced when, on the one hand, he says, "Catholics are just as good as Protestant" (which he says repeatedly—five times), and yet when asked, "Would they (Catholic) sometimes want to be Protestant?" he replies, "Yeah, 'cause Protestant are just as good as those people." Whether or not Bob knows that his Catholic family includes a Jewish uncle by marriage, we do not know; in neither interview, however, does he express hostility toward Jews. It is interesting to note that in response to the question, "Are these boys glad they are Jewish?" Bob says, "Yeah, 'cause Jewish are just as better as Catholic." Later in the interview when he is asked, "Would these boys (non-Jews) sometimes want to be Jewish?" he replies, "Yeah (the tester notes that Bob says this "doubtfully"), 'cause Jewish is as good as Protestant." This favorable comparison may merely be patter or may represent the same pattern expressed earlier in connection with Catholic and Protestant, or it might reflect the family's effort to accept the Jewish uncle, communicated to Bob in these words which he now repeats.

The significance of the data on Bob is more than the demonstration that a child's security and happiness are insufficient inoculation against prejudice. The case demonstrates a close correspondence between the child's values with respect to groups and the values which his family holds (re Negro and Jewish). The hypothesis is suggested that acceptance of family values is in the degree that a close affectional bond exists between child and family—as in the case of Bob. Other influences being equal, the parents are more likely to be a source of values when the home supplies the child's needs for emotional security. The powerful, autocratic parent may, too, determine his child's values (Mary) but it is doubtful whether these values are accepted as his own by the child and whether they persist beyond the power of the parent to enforce them.

### 6. *Case of Howard*

In the case of Howard, the tensions and conflicts of minority status are manifested. Howard is Jewish, 5½ years old, in kindergarten at School 5. There is little direct evidence from home or school of unpleasant experiences in which being Jewish has played a part. However, the atmosphere of the neighborhood in fostering Jewish-Catholic friction is certainly part of Howard's experience.

The interview with Howard's mother, though aimed at her relationship with her child, turns repeatedly to the mother's ambitions, which center around the economic success of her husband, fine clothes for herself, a new home, and the hope that her children "won't ever want for anything." Howard enters into this picture of ambitions, too: "I want my Howard to be tops in his class." She does not think that Howard has any special problems; he is well behaved at home, and he helps with his baby sister. "They just sit and listen to the radio 'til my husband gets home. I can't devote much time to play with him because of the baby." She displays no warmth and concern for Howard anywhere during the interview.

His teacher's reactions to Howard are not highly favorable. In general, he gets along fairly well in the kindergarten, showing an amount of aggression which is about average in the group, but the teacher rates him among the children whom she finds "least attractive in personality," and uncoöperative.

Though the personal data are rather meager, they suggest unsatisfying relationships in home and school and a lack of warm acceptance in the home. If the parents have insecurities linked with Jewish membership they are almost certain to be heightened by the group tensions of the immediate neighborhood. Personal insecurities and neighborhood tensions are probably the sources of feelings expressed by Howard in the interviews. Negro is rigidly rejected. Protestant is not recognized. By the third picture, Howard has become bored and irritable, but on seeing the Synagogue Picture, his interest is renewed and in a rush of words he identifies it as "shul," and identifies the non-Jewish boys as Italian. In quick answer to the question, "Are these boys glad they are Jewish?" he replies, "No. They want a Christmas tree." And to the question, "Would they sometimes want to be Christian?" he says, "Yes, they like Christmas trees, trains, electric." Considering that the testing date was the end of October, the association of Christmas with being Jewish may very well indicate a strong need in the child, or it may be evidence of a deeply felt disappointment. Further data on the discomfort in, if not rejection of, being Jewish are Howard's questions

to the tester after the interview is completed. Puzzled and anxious, Howard asked, "Can you tell by my name that I'm Jewish? Howard Garrett Watson. Is it a Jewish name?"

There can be no doubt that group membership is associated with certain anxieties and that being Jewish is bound up with selfhood for Howard. His manifestations of insecurity suggest the beginnings of personal conflict which could lead to the phenomenon described in the theory of "self-hate" (discussed earlier).

#### F. SUMMARY

In Section VIII, the data have been assembled with respect to variables and circumstances of the person and environment which help in understanding the development of attitudes concerning groups and the dynamics of group prejudices in the personalities of young children.

In each environment, the content and values which the culture assigns to groups are acquired by children belonging to different groups and with different personalities. This learning takes place in different ways. Children develop interest in certain group factors, accept and reject prejudices and values as the factors, prejudices, and values are in line with specific requirements of their situations and personal needs. The relative weight of any factor in determining social learning varies from child to child. Considering the total sample of children studied, the impact of dominant cultural values regarding race and religion is greater than the influence of individual variations in environment and personality.



## IX. SUMMARY AND THEORETICAL CONSIDERATIONS

This study of young children is an investigation of the early stages of social awareness and attitude development concerning social group phenomena. The results can be viewed, first, as they contribute to an understanding of the nature of social concepts held by young children and the sensitivity of young children to value and status differences and conflicts among social groups in our culture. The results can be considered, also, in terms of their contribution to theories on attitude development and on the rôle of group membership in the development of the individual. An examination of the educational and social implications of the data is also important.

### A. SUMMARY OF PROCEDURE

Perceptions and attitudes concerning racial and religious groups were obtained from 250 children of kindergarten, first, and second grades. The data were obtained in two sessions with each child. Interviews were carried out with the aid of a series of pictures (Social Episodes Test) which permit the projections of content and attitudes regarding racial and religious groups, and which permit the examiner to probe particular aspects of attitudes. The pictures are of simple social situations involving children on a playground, in a schoolroom, and on a city street. The situations are sufficiently ambiguous to elicit a variety of interpretations. After initial interpretations by the child, racial and religious identifications are introduced by the examiner. Questions, non-directive at the beginning and progressing to specific probing questions are asked by the tester.

The Social Episodes Test as a technique for studying social attitudes was evaluated. As a means of eliciting such data the test is highly effective. The pictures bring responses of considerable variety, proof of their providing a sufficiently interesting and ambiguous field to permit the children, after the introduction of group labels, to ignore the group factors in their story themes or to incorporate them in themes of neutral, friendly, or hostile interactions.

It might be supposed that the tester's introduction of the words, "colored," "white," "Protestant," "Catholic," "Jewish"—which are generally verboten topics in the schools—has a loading effect upon the responses. It is loading the responses only in attempting to create a situation in which it is permissible for the child to express his associations and feelings about groups. This is necessary to an investigation of his attitudes. It is not loading (with one exception) with respect to its influence upon the kind of reactions to group factors. This point rests on the data, which show (a) that content

and feelings vary from one group to another, and (b) that content and affect are drawn from experiences beyond the immediate suggestions of the pictures. The special influences of the Barrier Picture, which exerts some directional bias, have been analyzed in detail.

## B. SUMMARY OF FINDINGS RELATED TO THE HYPOTHESES OF THE RESEARCH

### 1. *Hypothesis A*

Cultural content and attitudes with respect to racial and religious groups are learned early in childhood.

The social environment of almost all the children studied is differentiated in some degree into social groups. This differentiation at its minimum involves an association of group identifications with some fragment of personal experience ("Catholic is St. Anne's school") or with hearsay ("Colored is bad"). It reaches a high point of differentiation in some children, in which characteristics and customs of groups are described in detail, in which status positions and group conflicts are enumerated, in which the child expresses his own feelings and in which he sees social relations among persons modified by such considerations as:

"White don't like colored, but maybe they know the boy (and will let him play)."

"They (children in picture) are saying, 'I don't like these people. I hate them and they are too fresh.' I don't say that to hurt other people's feelings. I play with them."

The groups studied are not equally familiar to the children. While none of the subjects fails to recognize Negro and white differences, many are unable to supply content for one or more of the religious groups. "Catholic" is unknown to 19 per cent of the white children and 53 per cent of the Negro children; "Protestant" is unknown to 61 per cent of the white children and 87 per cent of the Negro children; and "Jewish" is unknown to 21 per cent of the white children and 59 per cent of the Negro children.

Group differentiations are recognized at various levels of understanding: (a) The label is only a thing, something to do, an institution, but without clear reference to people (Catholic is "beads"; Jewish is "pickles"; Protestant is "sing songs"). (b) Group labels represent classifications of people along clearly or vaguely defined dimensions ("Jewish is people" or "Catholic, Jew, any kind of people, Protestants"). (c) Group labels stand for transitory conditions or behavior which make one into a certain kind of person or give



one a certain kind of experience ("When he gets dirty he turns into a colored boy," "(You are Catholic) when you go to Catholic school"). (d) Group labels represent classifications of people about whom evaluations are made ("They are saying the Catholic people are no good. Some people just hate Catholic people").

Not only are races and religious groups differentiated in content, but varying shades of hostility and friendliness are expressed about each. Group differences are recognized as signals for various kinds of "appropriate" social behavior.

The group receiving the greatest amount of hostility and rejection is Negro. Responses toward Negro correspond to adult culture patterns: (a) segregation of white and Negro ("White and colored can't play together"); (b) racial hostility ("I don't like nigger kids"); and (c) stereotypes of Negro character ("tough," "dirty," "kill whites").

Aggression is seen by the white children as coming from both races; when it is aggression in the sense of exclusion and rejection, it is more frequently seen as expressed by whites; when it is physical aggression it is frequently attributed to Negroes.

The Negro children have learned the same culture patterns of rejection by the white group and hostility between the races. The effects of awareness upon self-feelings are discussed below (Hypothesis B-2).

Among the religious groups, there is a higher frequency of expressions of aggression against Jewish than against Catholic and Protestant. The nature of the aggressions against each religious group again follows cultural prescriptions, and, more evidently than in the case of Negro and white, follows the peculiar patterns of the immediate neighborhoods (see Hypothesis A-1 below).

Based on responses to questions, "Is this little boy glad he is ——— (Negro, white, Catholic, Protestant, Jewish)?" and "Why?" the relative acceptance of each group compared with every other group is obtained. The results are, in general, in line with the status positions of these groups in American culture. The groups, in ascending order of acceptance, are Negro least accepted, Jewish next, and Catholic and Protestant next, about equal. (It is hazardous to interpret too literally the results on "Protestant," since it is an unfamiliar term to many children.) The order of acceptance is the same when responses of children who do not belong to the group in question and responses of children who are members of the group in question are considered separately.

2. *Hypothesis A-1: The Learning, With Respect to Racial and Religious Factors, Reflects the Particular Content (Sub-Cultures) in Which the Child Lives*

To the extent that customs and values are identical in the individual environments of the children, the nature of group differentiations and attitudes toward them will be similar for all children, allowing, of course, for the individual differences in experience and personality needs. The data present this picture, one of considerable uniformity in content and attitudes, which is attributable to cultural uniformities in group status and group conflicts.

The dissimilarity in the responses, however, is evidence of the fact that quite different cultural forces impinge upon the children. Local neighborhood patterns and family group memberships are among the important sub-cultural differences which influence the responses. In the neighborhood in which tensions exist between Italian Catholic and Jewish groups (in School 5), the children show a heightened awareness of these groups; classify people with reference to these groups (thus, if told "These children are Jewish," a probable continuation by the child is "These others are Italian"); assume a competitive and hostile attitude toward one or the other group. Attitudes and concepts of Catholic and Protestant assume the characteristics of another neighborhood (School 4), where Protestant and Catholic religions are an issue. Here the children are more aware of Protestant than in any other neighborhood and here the in- and out-groups are Protestant and Catholic. "Jewish" is a more remote out-group, often classified as "not American." Similar, though less striking, local variations appear in the other neighborhoods. There is much less neighborhood variation with respect to responses on Negro than on religious groups.

Within the neighborhoods in the study, the local patterns modify the particular content of group differentiations and increase or decrease the salience of group identifications and conflicts, but they do not erase the basic similarity in group hierarchy and prejudices in all neighborhoods studied.

The group membership of the family is another important context to consider in analyzing the social attitudes of the child. The data show the following influences of family group membership. Children who belong to a given group tend to have more information (no data on Negro and white) about it and tend to express more favorable attitudes toward it than children who do not belong to the group. The data do not indicate that children belonging to any one group show reliably more group prejudice than children

of other groups. Children of minority groups (Negro and Jewish) tend to show greater sensitivity, anxious concern, and personal involvement about group distinctions which include their own group than other children (see Hypotheses B-2 and 3).

3. *Hypothesis A-2: The Child Accepts Adult Attitudes Toward Groups*

These attitudes may be learned from direct teaching or from the "unconscious" teaching of the adult. The importance of this hypothesis is immediately evident to anyone who confronts himself with one or both of the following questions: How, in the family, neighborhood, school, community, are group standards and prejudices communicated to the child? How are the child's misconceptions and hostilities involving groups to be unlearned?

This research provides mainly indirect data bearing on the hypothesis. Many clues are to be found by culling from the responses the children's references to sources of attitudes and by examining the form in which expressions of attitudes are given. Adult values and interpretations of the social world play a considerably more prominent rôle than do interpersonal experiences of the child with members of any one of the groups. The rôle of the adult as intermediary can be inferred from the children's references to parents' admonitions ("Sometimes other people's mothers don't like Protestants to play with Catholics"); to adult accounts of experience ("A colored man gave my father (taxi-driver) a dollar tip"); to religious teachings which "justify" attitudes ("They put God on the cross and that's why they (children in the picture) don't like them," "I learned about colored and white in Sunday School"); and to generalizations which are probably formulated by adults ("If you're kind you play with everybody").

Many of the statements which express the child's own reactions to a group are of the kind, "It is bad to play with ————" or "I don't like ————." They are rarely of the kind in which personal experience alone leads to a negative reaction, such as the hypothetical response, "I played with a Negro boy; he was mean to me, and therefore, I don't like Negroes." There are numerous responses which show that prohibitions or expectations set up by adults either prevent personal experience which is available in the child's environment and by which the child could form his own opinions ("If she's white she's allowed to play in people's yards") or which predispose him to negatively affected perceptions of his experience ("Well, my mother said that sometimes colored people beat up white children").

4. *Hypothesis A-3: The Extent of Learning About Groups and the Degree of Crystallization of Attitudes Increases With the Age of the Child*

Increases in social learning correlated with age are in the direction of greater awareness of group conflicts, patterns of exclusion, and forms of stereotyping and derogation; and in the direction of greater acceptance of prejudiced attitudes. There is no age trend (between kindergarten and second grade) in the accuracy of information about group differences. There are as many misconceptions and distortions of facts among the older children as among the younger.

The following are indications of increasing crystallization of attitudes. Each of these factors increases slightly from kindergarten to second grade children, but is not solely a function of age: (a) picture interpretations include rationalizations for the behavior projected concerning groups; (b) there is a consistent attitude expressed on each appearance of a given group; (c) a philosophy of behavior toward persons or groups is expressed; (d) the meanings of group identifications are attached to people rather than to symbols or institutions or behavior; (e) there is personal involvement, either through identification of self or in emotional reactions to groups other than the child's own.

It is to be stressed that none of the phenomena studied (awareness of group differentiations, group concepts, group attitudes) develops by stages which can be related strictly to age or maturity. It is not possible to ignore a context of cultural influences and personality factors, and to ascribe to certain ages (5, pp. 338, 356-8) a given kind of response to group factors.

5. *Hypothesis A-4: When Allowed to Discuss the Topic, the Child Shows Considerable Interest in and Concern for Cultural Differences, and Combined With This Interest is an Awareness of the "Verboten" Nature of the Topic*

The data support this hypothesis. Initial reactions to the interview topic invariably portray a reserve, an uneasiness, or an effort to avoid the topic of race and religion. This is most evident in reactions to Negro and white. An effort to avoid discussion occurs most frequently among Negro children.

With the establishment of a permissive situation, the responses demonstrate that the children possess many ideas, curiosities, and also some pre-occupations about racial and religious differences, and that these topics are discussed among children themselves.

6. *Hypothesis B: Group Membership is One Aspect of the Self-Concept of Children*

Many of the children interviewed indicate a sense of own group membership. This is seen most strongly in regard to racial belonging. The child places himself in his own race and often attaches an affective meaning to it; in many cases, there is a competitive aspect in the affect (of glad to belong to this group rather than that group).

Self-awareness of religious group belonging is not apparent in all children. Jewish children show greater awareness than either Catholic or Protestant children. Negro children least of all identify themselves in religious group terms. There is confusion, too, for some children who are uncertain as to whether they are Protestant or Catholic. A very few children who say, outright, that they are either Catholic or Protestant identify themselves incorrectly.

It should be noted that non-membership in a group may be sensed by the child with as much import for his self-picture as membership in a group ("I'm glad I'm not Catholic"; Negro girl referring to Negro child in picture, "She wishes she was white").

7. *Hypothesis B-1: Group Membership is Related to the Child's Basic Need for Acceptance*

Recognition of the social meanings of group differences and identification with their own racial and/or religious groups which appear in many of the subjects have been discussed above. From these findings, certain effects of group factors upon the child's feelings of acceptance and rejection are inferred: (a) Group-belonging is seen as one determinant of acceptance in the play groups of children; the most marked influence is with racial membership. (b) Group-belonging is linked with conflicts in which the child anticipates he will become engaged. (c) Some children find security in belonging to a group which is seen as most desired ["I am glad I am a white boy. Some colored people say, 'I wish I was a white boy and (the children) would like to play with me.'" "They wishes they was American like us"]. (d) Concepts of groups which give an inherent "badness" or "goodness" to members of these groups contribute an abasing or enhancing quality to the child's self-image.

8. *Hypothesis B-2: Negative Self-Feelings and Personal Conflict Concerning Group-Belonging Arise Frequently in Minority Children*

Many children experience serious ego-threats as a result of group prejudices. Negro children reveal most vividly and often the feelings of insecurity resulting from anticipated rejection or insult from the white children. The same phenomenon appears among the Jewish children. On occasion, Catholic and Protestant children show an anxious concern over an anti-Catholic or anti-Protestant remark which has been the topic of competitive discussion among their playmates. Experience of cultural conflict in some of the children belonging to minority groups has given rise to ambivalent feelings toward their own group, documentation for the theory of self-hatred at an early age in childhood.

9. *Hypothesis B-3: The Rôle of Group Membership in the Concept of the Self Varies With the Rôle of Each Group in Society, Which May be to Increase or to Decrease Its Importance for the Individual*

The frequency with which children identify themselves by group membership and the function of the identification varies with the group and neighborhood to which the children belong. The importance it assumes is appreciably greater (as evidenced in the kind and amount of content offered in the projections) for children of minority groups and for children belonging to groups involved in local community conflicts. Where a group is not greatly involved in cultural tensions, where there is no attack upon it to increase its "group consciousness" there is relatively little personal involvement by the children (as with Protestant group, except in School 2; and with the Christian group, except in School 5). The rôle of group variables for the individual child cannot be predicted solely on the basis of cultural forces, but factors of intrafamily relations and personality, illustrated in the case studies, modify attitudes, intensify or diminish cultural conflicts experienced by the child.

### C. SOME IMPLICATIONS OF FINDINGS

The findings of this study challenge a number of familiar assumptions and practices concerned with the development of children. It has been assumed that social prejudices and group consciousness do not arise until late childhood or the teens, and therefore education of younger children has proceeded as if needs or interests concerning group differentiations in the social environment did not exist at these ages.

The data demonstrate the falsity and danger in this assumption. If the personal-social needs of children in our culture are to be met, their awarenesses, interests, fears, and securities related to group factors must be dealt with. This cannot be postponed until adolescence, but must be begun in pre-school and early school years.

Research on children's concepts of the world has explored with great thoroughness children's abilities to comprehend time, space, physical phenomena, etc. Research on methods of teaching these facts is extensive. But children's concepts of anthropology and sociology have not had the benefit of the same amount of research effort. For the most part, the concepts are allowed to "just grow" without the benefit of planned teaching. Surely they are no more difficult or no less important in personal development than the concepts in arithmetic, geography, physiology, etc.

The data from this study on concepts of race and religion show the high level of understanding of young children. At the same time they show the many misconceptions and distortions of fact which they accept. Since attitudes and feelings about race and religion are involved, as well as cognition, special methodological problems arise. Several theories concerned with such problems are examined in the light of the findings.

One theory is that the public school is a democratizing institution per se. Some corollaries are: (a) Children of various groups as they work together in the same classroom develop attitudes of acceptance and friendliness toward their classmates. It is tacitly assumed that this acceptance and friendliness are carried over to relations with people outside of school. (b) In a homogeneous school, good relations also develop automatically and problems of intergroup relations do not even exist. (c) Differences represented in the classroom or neighborhood must not be mentioned, for by so doing, problems of differences are created.

The findings do not support these beliefs. Friendly and coöperative classroom behavior in School 5 between Jewish and Catholic children did not prevent the growth of many group stereotypes and group prejudices in these children. Similarly, in the school where there were few or no Negro children, there was at least as much prejudice toward Negroes as in the school where there were more Negro children. Stereotypes and prejudices do not arise primarily from interpersonal contacts. Contact cannot then be used as the only means for prevention or changing prejudices. Children very often simply regard their happy contacts with persons of rejected groups as exceptions which in no way alter the generalizations which they make about the groups as a whole. (For example: "I hate to be near them

(colored people), but our cleaning lady is nice, she helps me." "My boy friend is Jewish but I like him.")

The theory which advocates ignoring cultural diversities can be challenged on several points. Since children *are* aware of differences and have questions about them, an atmosphere in which these differences cannot be recognized and discussed puts cultural questions in the realm of tabooed subjects and may create suspicions and fears about them.

To proceed as if group differences do not exist is to ignore the cultural context in which children live, for society does not ignore differences; family customs and values and names and languages all reflect group-derived variations. A rule of silence about differences not only fails the child in not helping him to achieve a better understanding than he has of group factors, but the silence may also be perceived by the child as tacit agreement with societal prejudices. (For is it not part of "polite" prejudice to endure while the rejected group is present or to accept the person present as an exception?)

Another theory considers group prejudices and conflict over group-belonging as by-products of unhappy, insecure personal situations. Personally secure and happy children, it is held, will not develop prejudices or insecurities about groups. This theory seems untenable in view of the extremely high proportion of the children whose responses show awareness or acceptance of group prejudices. The case material also suggests that personal security or *insecurity is not the sole determinant of group attitude. And perhaps most* important of all is the evidence that children's perceptions of groups develop out of adult values and the status quo; that is to say, that many of the children have opportunity for only the kind of learning about groups which involves stereotypes and rejection, especially of groups not present in the child's environment. This learning cannot be interpreted as a form of aggression consequent on personal insecurities and frustrations.

The data of this study are relevant to another assumption about the teaching of good human relations. Teaching general democratic principles or the "Golden Rule" is inadequate unless the teaching is specific in its applications. Such specific teaching is reflected in the response of the child who gives a friendly response in the Negro Barrier Picture and adds, "It's not nice to make fun of colored people." The specific training needed is the kind • which faces cultural diversities in the form and in the situations in which the child experiences them (as the child differs from his playmates, as he observes ritual, customs, characteristics for which he knows no explanation) and which provides him with information and attitudes and social techniques to meet these situations.



This investigation gives rise to many unanswered problems which require further research. Experimentation with methods of retraining attitudes and developing social concepts is necessary if the present theories and methods which appear to be inadequate are to be followed by more effective approaches to intercultural education.

Some of the problems which are raised in this research but which are not answered by it are:

1. What is the relation between the perceptions and attitudes obtained in the test situation and the children's behavior with members of the groups involved?
2. How does the home perform its "educative" function with respect to social concepts and attitudes? How strong are the forces of the home in comparison with other influences upon children's attitudes?<sup>6</sup>
3. What are the determinants of the reactions of minority children to social discrimination? In this problem, analysis of the home influences would be especially important.
4. What are the awarenesses and attitudes of children of different ages with other environmental backgrounds? How do personality factors relate to the acquisition of attitudes and their change?

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<sup>6</sup>Data on these problems were gathered in a later phase of the Philadelphia Early Childhood Project.



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